KIMBALL and DECKER

TOURING WITH TENT AND TRAILER

Touring with Tent and Trailer

WINFIELD A. KIMBALL
AND MAURICE H. DECKER

BEFORE you start on that two-week automobile trip, six months' tour, or even a week-end in the country, it will be worth your while to consult this book, which makes touring easier and less expensive. It tells how to travel comfortably and enjoyably, camping out at night. Thousands of people every year are turning to motor campin vacations or week-end tours. have gone at it with the pro ment have invariably found i cheaper but more pleasant.

But camping on an autom requires a certain amount of which is usually only acquire long, and not always agreeabl ence. This book is designed tc beginner needless mistakes and tour a success from the start, by out what is required for camp what not to take, how and camp, and all the other esse touring.

"The subject is covered with the comprehensiveness . . . . A useful book."—*N. Y. Herald Tribune.*

"Should be highly useful."—*Bruce Catton, NEA Service.*

"Full of exact information."—*Baltimore Sun.*

"Kimball and Decker are supplying a demand . . . . It's a good work."—*Minneapolis Star.*

Illustrated

From the collection of the
Prelinger Library
San Francisco, California
2006

T

B E
a
even
be w
whic
expe
forta
night
are t
vacat
have
ment
cheap
Bu
requi
which
long,
ence.
begin
tour a
out w
what
camp,
tourin

"The
compr
book.'

"Shou
NEA

"Full
Sun.

"Kimb
deman
Minne

T

B E
a
even
be w
whic
expe
forta
night
are t
vacat
have
ment
cheap
Bu
requi
which
long,
ence.
begin
tour a
out w
what
camp
tourin

"The
compr
book.'

"Shou
NEA

"Full
Sun.

"Kimb
deman
Minne

Touring with Tent and Trailer

(*Courtesy Pinches Pleasure Trailer Corporation, N. Y. C.*)

Wave good-bye to worries and weariness when starting on a tour with tent or trailer; adventure and romance beckon and nature smiles a welcome. (*Frontispiece.*)

TOURING WITH TENT AND TRAILER

by

WINFIELD A. KIMBALL

and

MAURICE H. DECKER

New York WHITTLESEY HOUSE *London*

McGRAW-HILL BOOK COMPANY, INC.

Copyright, 1937, *by the* McGraw-Hill Book Company, Inc.

All rights reserved. This book, or parts thereof, may not be reproduced in any form without permission of the publishers.

SECOND PRINTING

PUBLISHED BY WHITTLESEY HOUSE
A division of the McGraw-Hill Book Company, Inc.

Printed in the United States of America by The Maple Press Co., York, Pa.

To the genius who invented good roads. May his detours in life be few and far spaced!

Preface

THERE are many reasons why most of us ought to get out into the open and get a new mental slant on life. The trailer offers a new opportunity for us to discover Nature in all her wonderful moods and influences and to go into the open where freedom and good-fellowship abound.

With a hundred dollars in your pocket, you can take your family camping for several weeks and can meet all costs. With five hundred dollars, you can go on an outing with your family for several months. It will be money well spent, for such a trip will rejuvenate the whole company.

Follow the sunshine route for a time with tent and car. Roam down to Florida for the spring months. Then turn westward and go over any one of the three transcontinental routes toward the great scenic West.

By the time you have visited the glorious national parks and the Pacific Coast, you will be ready to turn east and go into the summer sunshine of the Atlantic seaboard. Such a trip will work wonders both mental and physical for everyone in the camping party.

Don't think such a trip is impossible because of cost. In fact, after many years of camping, we find that a family of four persons can live well and meet all costs on a camping trip for less than two dollars apiece a day. This figure covers not only the cost of living for all, but includes the expenses of the car, such as gasoline, oil and any minor repairs. You can actually figure on the cost per mile as four cents, which is not a cost so much as an investment in good health and spirits for every member of the family.

There is a science of camping, and that is just where this book counts. Our experience in camping for many years has taught us many facts that a first-time camper should know. Such facts are what we are going to tell you. There are many camp units which you will think you may need, but as a rule the first-time camper takes too many of them. It is our job to tell you what to take along when camping and what not to take. Go comfortably but don't go packed down with a lot of nonessentials. Your family can live just as comfortably on a camping trip as at home, if the proper camping outfit is selected. You will find that your food and sleeping accommodations can be just as fine in the open as in your home. Modern equipment has been so improved that camping is a delight and a comfort scarcely realized by many who have never tried it.

The open door of the highway is the door of future opportunity. This camping trip is not merely a temporary thing. It will have lasting effects on all in their future success. Life in the open broadens the mental horizon.

The sky is the limit, and a happy horizon is all about you. Visiting many places also broadens this horizon. Travel is an education. You may have been stagnating at home without knowing it.

The motorcar and the camp kit make their own seasons. With them you can follow the sunshine of the seasons at will. The world and all its places are yours to see. Colds and ills, chills and pills are not a part of the camp life. Aside from a simple first-aid kit, there should be no need of doctoring. Best of all, you will find that the old world still has a heart. Campers are among the most generous and hospitable folks that you will ever meet. The open road soon gives back faith in self as well as faith in humanity in general. Doing a good turn daily is the camper's creed.

If the exchequer gets a bit low, you need not worry, because you will soon find that there is many an odd job you can do to help some farmer who is short of "hands" and long on work in the varying seasons of crop planting and harvesting. In the towns and cities, too, there is usually some work waiting for the fellow who is willing to put his hand to anything.

Two friends, who had had business reverses, managed to buy a car and a camp outfit with the little cash left. They set out camping and covered most of the scenic regions of the United States. Two years of camping about the country put them into fine fettle, and when they came home again they soon found places in profitable work because they had a far healthier and more optimistic attitude toward life and humanity. To be sure, there

were times when cash was low, but they always managed to find some work that would tide them over so that they could keep going.

In the earlier days when jobs were secure and money was easy, too many of us were prone to get into a habit of spending our vacation each year in the same old place. This seemed good at the time but, after one has tried camping, which means going to different places and seeing different things, the old habit of "vacationing" is soon forgotten. Turn away from one-place vacations. If more people would try gypsying around with tent and car, they would never be satisfied to settle down again into the rut of visiting the same spot every year.

After all is said and done, camp life opens the path to a new kind of vacation. It gives a new lease on life when we need it most. With good roads, dependable cars and fine camping equipment at moderate prices, there is no good excuse for you not to enjoy the great and happy adventure of a life of freedom in the vast out-of-doors.

WINFIELD A. KIMBALL.
MAURICE H. DECKER.

WHITE PLAINS, NEW YORK.

Contents

PREFACE vii

CHAPTER I—*Motor Trail Campfires* 3

CHAPTER II—*Roads and Routes—How to Plan Your Tour* 15

CHAPTER III—*Motor Camping Tents* 30

CHAPTER IV—*Camp Beds and Cots* 48

CHAPTER V—*Camp Stoves and Cooking Kits* 62

CHAPTER VI—*Practical Camping Furniture* 76

CHAPTER VII—*Special Lightweight Outfits* 88

CHAPTER VIII—*Motor Camping Clothes* 99

CHAPTER IX—*Folding Trailers and Camping Cars* . . . 113

CHAPTER X—*Choosing and Using a Trailer Coach* . . . 130

CHAPTER XI—*The Motor Camper's Car* 151

CHAPTER XII—*Packing Your Car for the Road* 166

CHAPTER XIII—*Camp Cookery* 181

CHAPTER XIV—*Well-groomed Motor Campers* 199

CHAPTER XV—*Camping with Small Children* 206

CHAPTER XVI—*Camp Sites: Tents, Trailers and Cabins* 211

CHAPTER XVII—*Desert and Mountain Trails* 229

CHAPTER XVIII—*Women Motor Campers* 248

CHAPTER XIX—*Amusements in Camp* 262

CHAPTER XX—*Cautions for Motor Campers* 270

CHAPTER XXI—*What It Costs to Motor Camp* 278

INDEX 295

TOURING WITH TENT AND TRAILER

Chapter I

MOTOR-TRAIL CAMPFIRES

OUR camp among the pines on the bank of Yellowstone River was surrounded with romance. Trout lurked in the tumbling waters below our tent. Over in the morass of Lake Yellowstone several thousand moose were eating the tips of tender bushes. Beaver worked farther downstream, felling cottonwoods and willow, dragging short lengths of logs over rocks and down steep hillsides to their dams and lodges.

Higher up on the mountains behind our campfire, the majestic Bighorn pressed his rubberlike hoofs against the slippery rock and watched the bears—black, brown and grizzly—amble along below on their way to the food dumps, to paw and quarrel over the refuse from hotel and camp.

We had pitched the umbrella tent on a narrow strip of level ground and driven the car up beside it. The camp table and chairs were set up and the folding gasoline stove was burning merrily. Our coffeepot covered one burner and the fragrant odor of bacon arose from the pan on the other.

Don, the oldest boy, was fishing from the river bank, whipping his spinner bait out into the rough water fifty feet from land. Dick, the youngster, had discovered a rusty-haired brown bear up on a broken tree stub and was

(*Ewing Galloway.*)

When nightfall has shut out the rest of the world, the campfire gives a glow of romance and friendly cheer.

trying to coax it down with a strip of bacon rind. We unrolled the air beds and began to inflate them as the cook worked over her stove and table.

Don came racing up from the river waving his string of four cutthroat trout. They were fine fish, twelve to

fourteen inches long, and we immediately visualized chunks of crisp meat, rolled in egg and corn meal and fried tender in hot bacon fat.

It was only a moment's work to lay the fish on a log and clean them. When the meal was ready, we attacked it with the vigorous appetites only motor campers can acquire. Night was well along when we finished eating and the boys scurried out into the timber and gathered wood for the evening campfire. For, no matter how nicely the gasoline stove cooks our meals, we insist upon enjoying the romantic flavor and the inspiring company of a wood blaze.

We were motor camping and had been at it over three months. We were seeing the beauty spots of America conveniently and economically. We were seeing them from the ground floor, too, in close contact with human nature and with natural beauty. We could and did go when and where we pleased, cutting off parts of our original itinerary and adding to it at will. We were doing all this for but a fraction of the cost we should have had to pay to railroads and hotels for the accomodations of a similar journey.

Romance and adventure beckoned to us on every road and in every camp. We drove out through West Yellowstone into Idaho in the middle of a bright afternoon. After passing Christmas Tree Park, named from the shapely evergreens growing there, we ran into the Targhee Forest.

We realized that water would be scarce, for signs were posted to warn campers that the next creek was fifteen

to thirty miles ahead. Although the running-board refrigerator was full of cool water, we didn't care to make a dry camp, so, when we came to a side trail leading down toward Snake River, we pulled the wheel over and

(De Cou from Ewing Galloway.)

Bears in a western National park take tourists in their daily stride, so Big Bear and Little Bears cross the road unheeding human intruders and their car.

followed. Down we dove, on and on into shady cool depths of timbered rock until a narrow stream crossed our trail under a crude log bridge.

The bridge appeared to be none too substantial, so we camped. The tent was staked over a carpet of pine needles and leaf mold. We cleaned a pair of trout caught in the

park and carried in the iceless refrigerator. They were still sweet and cool. I scraped them with my hunting knife and walked down to the stream to rinse them.

While bending over the water, I heard a crash in the timber a few rods away, then several grunts and a wheeze—much like the noise a pig will make when in his rooting he discovers some dainty. I laid the fish down and started off to investigate.

Another sound was now audible, a steady droning or hum, like a gigantic flywheel in motion. I had partially guessed the truth before I arrived. Peering between the pines, I saw a fair-sized black bear thrusting his snout into a section of hollow tree trunk. It lay beside a decayed stub, and I guessed that the bear's weight had broken the section off when he climbed after the store of honey.

He was tearing away at the chunks of comb and bolting them voraciously, paying little attention to the fighting swarm buzzing about his ears. At intervals he would stop his greedy feast long enough to slap at his nose and then he would go on gulping honey.

The bear must suddenly have decided he had had enough, or else he scented me watching, back behind the trees, for with a quick scramble he dashed away, harassed at every jump by the angry insects.

Not a bee was visible. This was my chance, I thought, and I shinned up that stub in double-quick time and peered into the ragged open end. Sure enough, large bunches of loaded comb, dark brown in color but wonderfully sweet, met my eyes.

But as I looked over the edge—"b-u-z-z-z!" A solitary bee bumped into my face. I brushed him off before he had time to do any damage and scooped some big chunks of the comb into my hat. Then I started down.

But I had momentarily forgotten that single bee. Just as I began to slide down, I ran into something red hot and sharp. Both hands were full, one of honey and the

Little Bear, curled around something good, is oblivious of everything else.

other of tree. I hated to drop either. I was helpless. Disregarding all the known laws of gravitation, I think I slid straight up a foot after that collision. The persistent bee stung me three times before I reached the ground, and I know he could have chosen a place just as handy for him and much more convenient for me, a motorist.

I was welcomed royally back to our camp, for sweet, wild honey is delicious spread over smoking hot cakes and biscuits. The family urged me to return and bring

a pailful, but I firmly declined. That whole swarm would now be home again, waiting eagerly for the next despoiler. That was not going to be I.

* * *

Who says this is a big world? To the motor camper our whole land is a small one. I lifted the pan of sizzling steak from the bed of coals, set the kettle of steaming cocoa on the camp table and threw a big cedar root on our fire to light camp as we ate. None of us could resist any longer the mingled odors of burning wood and frying steak. That combination would hearten a bull after a stock market crash.

Juicy, lean steak, fresh from the cattle range, potatoes and gravy, buns and butter, tomato salad and hot cocoa! The family gathered eagerly around the little table with folding legs that seemed in danger of collapsing under the weight heaped upon it.

The Arizona air was crisp and snappy. We ate with sharp hunger. Our camp lay at the base of a flat-topped mesa, a square cliff of gray-red earth sprinkled over with squat shrubs of cedar. The desert wind swept across the plain beyond and sucked down over the brim of the cliff. Our tent broke the chill from our backs.

We had driven four hundred miles since breaking our morning camp near Needles, with hot, furnace winds that are equaled only by those that cross the floor of Death Valley. The highway had been smooth gravel, easy to travel, but four hundred miles is a pretty good one-day jaunt and we gratefully appreciated the restful peace of our lonely camp.

The route for the next week was being discussed. Should we turn south for Phoenix and play golf in the bright sunshine of that Arizona resort? Or should we work north, past the Grand Canyon into the Kaibab and wait for the open deer season?

I pulled out my clip of traveler's checks. They were holding out well. The tires on the car were good for many thousands of miles yet and we had two high-powered rifles packed in cases at the bottom of the trunk.

Said Don, "We can play golf at home. I saw wild turkey tracks at the bottom of the cliff when we first made camp."

That decided the question. It was to be the Kaibab Forest and a deer hunt. Then the exhaust of a car droned out from the still desert air. It stopped even with our camp, with a squeal of brakes, and a man stepped out and approached.

"Howdy," he said, moving into the circle of firelight. "I've been looking for a good place to camp for an hour. Mind if I run in here beside you?"

We assured him we did not. There is an *esprit cordiale* among motor campers that grows particularly strong out in the lonesome spots of the West.

His family jumped out and attacked the duffel bags on the sides of the car. Order promptly emerged from temporary chaos, and his fire soon burned brightly before the open-front lean-to tent.

Watching them make camp, we fell to reminiscing over past experiences. Five years before, we had broken down near Sundance, a tiny settlement in Wyoming.

forty miles from a railroad. Repairs were more difficult to obtain then, and we had spent a week in the mountains waiting for our new oil-pump gears to come from Denver.

We were now speaking in appreciation of how we had turned that misfortune and delay into an adventure. Fish and game had been abundant about our camp, and we had been actually sorry when we finally left the place.

One day we had helped to pull in another tourist with a burned-out bearing. His car had stood parked beside ours as we both waited to get fixed up. I chuckled as I asked, "Have you forgotten the half-grown coyote Ferris had chained on his running board?"

The antics of the animal had amused us a great deal. When, one night, it chewed a hole in a tire on the Ferris car, that had been more amusing to us than to the Ferrises.

As we were talking it over, our new neighbor, who was making camp behind the Arizona mesa, straightened up and walked over, visibly excited.

"I heard what you said then," he eagerly cried. "That coyote belonged to my brother. You camped with him in Wyoming. He told me all about it when he got home. Gosh, here we're camping together tonight in the Southwest. Who says it's a big world?"

We don't. In the mammoth camp at Saint Louis we had another pleasant surprise. We were headed south again, having been home only three months after a spring trip across Texas and Arkansas. Our outfit was new—new car, tent, stove and cots—and we were rather

proudly showing them to some of our neighboring campers.

In my conversation I mentioned an unusual item of equipment we had carried on our spring trip. It was a small galvanized tub that we enameled black and slung inside the rim of our spare tire. That tub had proved most useful in those early days of motor camping. Camp grounds with shower baths were rare and many a time we enjoyed the luxury of a hot bath in our tent with that little old tub.

When we were speaking of it now, a man walked up. "You mentioned a tub on back of your car, Mister. I have only seen one tub on the road and that was carried by a fellow we camped with in Texas last spring. And darned if you don't look like him!"

He had started to California from his Tennessee home. We were on our way from Indiana to the Ozarks. The spring before we had camped together four nights in the big Lone Star State and at the warm springs of Fort Stockton his party had shared the luxury of our tub.

We reached Washington, D. C., late one afternoon. It was mid-July and we were headed for the municipal camp. This was a dandy one, judging from the comments of tourists we had met on the road. I pulled up beside a curb and glanced around, looking for somebody who could direct us. A plainly dressed man was leaving an office door. He looked professional in his blue suit, and the quizzical wrinkles about his shrewd eyes encouraged us to stop him.

"Wonder if you could direct us to the public camp ground?"

He removed the cigar from his mouth and said, "Sure. Turn about and go back seven blocks. You'll see a sign on the left corner. Follow it."

I watched him enter an official-looking car and, while my memory for faces is none too good, I suddenly recognized him—not from any personal acquaintance, but from his pictures in the press. I had asked a member of the President's cabinet how to find the motor camp ground. And he had told us! Believe me, my wife got some kick out of that!

When any tired businessman gets so that he doesn't enjoy a good Scotch joke, something is wrong with his disposition and his digestion and it's time for him to go motor camping. City folks, in particular, reach a point of discontent and worry about once a year, when everything seems to go wrong and the stock market or the parking-space problem keeps them awake nights. Although they may not realize it, what they need is a liberal dose of outdoor recreation *via* the motor camping route.

Camping is good not only for the sick, overcivilized man, but for any man and for his wife and children, too. In the rush of our modern business and social life, we have a tendency to grow away from our families. Camping together will bring the American home into a close-knit relation of sympathy and understanding, sometimes impossible to effect in any other way.

Motor camping gives a busy father a dandy chance to get really acquainted with the youngsters. They eat up camp life and touring with vivid gusto and get a thrill and a kick from Dad's companionship that they will never forget.

One of the best sports I ever camped with was a woman —my wife. A two-week camping trip will bring two people to a bigger and better understanding of each

Boys, like these two beside the Lewis River in Yellowstone Park, can find no end of fun and interest on a camping tour.

other's problems. Maybe more motor camping tours would mean fewer trips to Reno. It's worth trying, at least. We all need the opportunity a camping trip gives us to broaden out into ways of better health and rest that are closed in everyday life. Let's go!

Chapter II

ROADS AND ROUTES—HOW TO PLAN YOUR TOUR

TWELVE years ago, we wasted an hour trying to find someone in Fort Worth who knew enough about Texas roads to tell us how to drive out of his home town toward Dallas. The boy who sold us ten gallons of gas out in front of the remodeled livery stable didn't know; neither did any of the merchants on the street. It began to look as though we never would find Dallas, some thirty-five miles away. This is an example of how the old-timers of motor camping, ourselves among them, had to dig out road information.

We finally found a man in a tire-repair shop who thought he knew. So we followed his rather vague instructions down several unmarked streets out into the open country until we ran slap into a damaged bridge, with a muddy detour leading across the ditch bottom.

We always were unlucky with bridges. When we arrive, they go haywire upon the slightest excuse. This situation reminded us of one happy time when we reached a river in the Ozarks. The bridge had been

washed out the week before and that very morning of our arrival the ferryboat which had been handling traffic had given up the job and sunk.

There were nine cars parked at the opening of this Texas detour—a precarious-looking piece of road. One driver more courageous or foolhardy than the rest had started across in his four-cylinder car and halfway over had mired down for good. He was stuck, and we don't mean maybe! We still smile when we recall the puzzled look of chagrin on his face as he stood there in the mud and looked at his foundered rear axle.

There wasn't a board or a plank within a mile to use in building up solid footing under his wheels. Things looked pretty blue to the rest of us. We were fifteen miles out of Fort Worth, nearly halfway to Dallas, and behind us were several mudholes through which we had just slithered with nothing to spare except anxious hearts.

Now a pair of kindhearted ranchers had gathered to see the fun and they offered to pull us through the mud as a special favor for merely five dollars a car. As the detour was less than fifty yards wide, we declined their friendly advances with fervor.

Finally, the drivers of the cars went into a huddle and decided that cooperative action would win the day. Accordingly, we rolled up our pants' legs—that is, all of us except one khaki-clad girl who insisted on helping—and charged bodily into the mud. By main strength we lifted and pushed the mired car across to the other side.

Then we tied three towropes together and made a hundred-foot line. One by one the cars shot into that bad road in low gear and with open throttles. Just as soon as one mired and stuck, we hooked the long rope to the front axle and a car out on the solid road ahead jerked it through. The two ranchers decided they might make more money hoeing their crops, so they left after watching us get three cars safely across.

Every time we follow one of the well-marked trails across a dozen states, we remember this incident and offer a vote of thanks to the genius that developed our present system of improving and marking the main highways.

Twelve years ago, a cross-continent tour was an adventure. We did not start out upon one in care-free nonchalance. Rather, we took it mighty seriously and loaded ourselves and our cars with route books and maps among other lifesaving equipment. Our friends gave us a farewell party and clasped our hands solemnly when we left. Unfortunately, some of our road information turned out to be more or less bunk when we got to remote sections of the South and West. A lot of the roads that showed up most plainly on the map were hard to find among the cactus and the mountains. But we were thankful for whatever proved to be correct and we considered ourselves lucky when we didn't get lost more than once a day.

Now, for a cross-country trip, one needs only a small map showing the through highways and their United States route numbers. With this much information he

can get by as easily as a Yank in a Paris gin cellar. Even the deserts are sign-posted at every crossroad. The Auto Club of Southern California pioneered this thorough marking of highways, and they marked the southwestern

Today the tourist can keep his course by using a small road map and checking it by the road signs along the highways of the United States.

routes so well, it was just as easy to find the way as it was to get lost.

What a relief it was to run into one of the roads they had covered with their trail-blazing cars. You will understand how much we appreciated those neat metal signs, with arms extending in each direction and bearing the names of the nearest towns and their distance away, when we tell you we have followed hundreds of miles

of roadway blindly, trusting to luck and to the store advertising signs scattered along the fence rows to get us to our destination.

About twelve years ago, there was an epidemic of highway associations. These organizations sprang into existence overnight and they mapped out certain routes and marked them with their own characteristic signs. The Lincoln Highway Association, one of the first and the largest, did splendid work in marking the Atlantic-to-Pacific route. Many trails overlapped and the telegraph poles of the country were covered with colorful and picturesque signs. We remember we followed a goat's head to Glacier Park and a yellow rising sun through Minnesota and South Dakota to the Yellowstone.

But, as is the case with almost everything, the highway business was overdone. Small, unimportant routes were laid out with the sole purpose of leading the tourist through certain towns that were anxious enough to trade gas and groceries for his dollars to subscribe heavily to the promotion of said highways. Some rather bad pieces of road were signed and advertised as main highways. The gang that could make the most noise got the most traffic, no matter what condition their road was in.

It was a big thing, then, when the United States Highway Department took over all important routes and marked them uniformly and efficiently with the little white shield we now watch for so eagerly when we are touring.

Not only are these United States routes well marked, but their signs bear numbers calculated to make our

traveling as easy as possible. We don't have to puzzle over why road number 20 in Ohio turns into number 16 in Indiana and then to 56 in Illinois. Road numbers have ceased to be chameleons. They are now fixed and enduring. When we leave Atlantic City for San Francisco, we follow one number all the way. It is our own fault if we get off the trail. We no longer have to backtrack, as we did one time in the Missouri Ozarks.

We get excited every time we think of that. Leaving Springfield one early morning, we were directed over what we thought was the right road to Saint Louis. After we had followed it about a hundred miles over muddy, slippery mountain roads, with no bridges over creeks, we suddenly were stopped and told that the way on ahead was blocked with high water. It would be a month, at least, before cars could safely make it. The only thing to do was to turn back. So we rambled back to Springfield and started all over again. Before we left town, we hunted for the man who had given us that wrong steer but we couldn't find him. That part is what makes us mad when we remember.

All main east-and-west highways marked under this United States plan bear numbers that are multiples of 10. Road number 10 at the extreme north leads us from Detroit to Seattle. As we drop farther south, we run into road number 20, connecting Boston with the Yellowstone. The farther south we go, the larger are the road numbers. Highway 90 is practically the Old Spanish Trail joining Jacksonville and San Diego.

North-and-south roads carry uneven numbers. Starting with number 1, that leads from beans to grapefruit or, rather, from Boston to Miami, we find numbers 11, 21, 31, etc., joining the North and the South. Highway 31 is a favorite route south through the Middle West, extending from Mackinaw, Michigan, to Mobile, Alabama.

You note how the numbers run in succession, the farther south or the farther west you travel. This helps you to check up on your position or your direction, in case you become puzzled or confused. You are able to tell a north-and-south road from an east-and-west route merely by its number. It is a very practical and helpful system.

Not only are the road numbers and signs uniform, but you find signs of the same kind marking curves, hills and detours. When you see a big "STOP" up ahead in the glare of your headlights, you know there is something dangerous to watch for and that the sign won't turn out to be a warning to pause at some local beanery for refreshments.

An excellent feature of these main routes is that they may lead you out around the busy sections of large cities, away from heavy traffic. You also pass small villages at their edges and save time by avoiding them. In the hey-day of organized highways, you were led down the main street of every hamlet that had subscribed to the general fund. Many a time this meant as much as a mile out of your way.

We will mention Raton Pass between Colorado and New Mexico as an example of how good roads and good road signs have speeded up safe, convenient touring. The first time we negotiated the pass, it took over half a day

(*Ewing Galloway.*)

With a general plan well in mind at the start, each separate stage of the tour can be definitely mapped out before breaking camp, as in this informal conference at the tent door.

of careful driving. There were trails leading off the regular road that confused and puzzled us. We never knew whether we were right or wrong.

The last time we came over, we made it in about an hour. It was all smooth roads and good grades and was perfectly sign-marked. This pass is advertised to be open

the year round, and late fall tourists driving from the vicinity of Kansas and Missouri or north of these states should consider the route leading through Trinidad, Raton and Sante Fe on their way to the southland.

So our roads and routes pretty well take care of themselves now, provided that the motor camper knows where he wants to go. And that brings up a matter of importance to be heeded in planning a vacation. In his eagerness to grip the wheel and take to the road, a perfectly good camper may overlook some of the preliminaries that will make him a better tourist.

We go motor camping to see the sights, and a good tourist will want to see everything along his route that promises to be interesting. One should start getting ready for his vacation at least a month before the morning he locks the front door and forgets to stop the daily paper and the milk. He should procure all the information he can about the country he will tour, find out about all of the parks, cities, national monuments and historic spots, and then from this mass of detail pick out a list of what he wishes to enjoy and use that as an itinerary.

It is not hard to get these data. In fact it is very easy, for the motor camper is recognized and appreciated as a money spender and every state in the Union is bidding for his patronage. Many cities have special tourist bureaus to supply information by mail or upon personal call and they are eagerly glad to help plan a pleasant tour. All the towns support chambers of commerce that will give aid in like manner.

Some places extend special courtesies to visiting tourists. Last fall we spent a week in one large southern city that was bidding in earnest for the golden tourist crop. So that their stay might be made more pleasant and convenient, people whose cars displayed out-of-state license plates were immune from the strict parking rules. The native son moved his car every thirty minutes or the police moved it for him—to the pound—but we brazenly left ours standing in one place for hours while we visited the shops and shows.

Let us tell you what happened when we drove into Deadwood, where the bad men died with their boots on in the roaring days of old. The Black Hills had just realized what a tourist was and they had begun to advertise their wonderful scenery to draw him there. They wanted to divert the throngs of motor campers following the Yellowstone Trail, divert them south into their friendly midst. So they were putting on a campaign of cooperation we have never seen equaled since.

A companion preceding us told somebody in the town that we were coming—the camp custodian, I guess it was. Our license plates seemed to be the only identification needed, for as we entered Deadwood, we were hailed loudly from the sidewalk—by name, too. A mustached old-timer in cowboy boots and a five-gallon hat was approaching our car. We didn't notice just then what he wore, for our eyes were glued on the big star pinned to his vest. It was engraved with the awe-striking word "Marshal," and looked a foot wide. We wondered what

ordinance we had broken and hoped that the jail was clean.

But we learned happily that Friend Marshal had been posted on that corner by the mayor to head us off. We were invited up to the city offices, greeted cordially and given every possible kind of assistance in our job of discovering what the Black Hills have to offer the motorist—which is plenty. We were told confidentially where to catch some big trout and this we did. All told, we had a most pleasant week among those black-spruce-covered mountains. Our years of travel have only clinched our original opinion that any locality is ready to meet the motor camper more than halfway, so long as he is reasonable and a gentleman.

Unless you check up carefully on the interesting points scattered along any point, you may miss some of them, as the most interesting ones are not always the most loudly advertised. Camping through Kentucky, some time ago, we drove into a small town which has two spots of great historic and artistic interest. We had never heard of them before, in fact, we must confess to never having heard of the town before, either. It was Bardstown and we visited the "Old Kentucky Home," residence of the author of that famous darky song, with its valuable period furniture and hangings. And at St. Joseph's Cathedral we saw priceless paintings by Murillo, Rubens and Van Dyck. A casual inquiry at the local automobile club office had revealed them to us.

Sources of helpful information are numerous. In the case of the national monuments and national parks free

(*Ewing Galloway.*)

Would you like to follow in the footsteps of this man to successful fishing in the midst of grandeur in Yosemite National Park? Consult the booklets of the National Park Service.

booklets describing them are to be had from the Director of the National Park Service at Washington, D. C. These are called "Rules and Regulations" of whatever park you may ask for. They are printed for all the more important places, so write for what you want, naming the spots you expect to visit.

These booklets are comprehensive and complete. Their data and information are accurate and unbiased. For example, the booklet on Yellowstone Park contains ninety helpful pages. It begins with a general history and description, then goes into detail about the individual attractions—geysers, bears, pools, fishing—and gives rules for campers and traffic regulations. You are told all about the side trails and the main highways, what to expect in the way of mail and telegraph service, location of desirable campgrounds, where to get gas, oil and groceries, prices of meals and rooms at the hotels and camps—everything that the visitor will want to know and should know about the place. There are maps of the park and a list of other publications to read if you want more information on this wonderful monument that pictures the Old West as it was.

For information on local places of interest, a sure-shot source is to be found in state and city organizations. The Conservation Department or Commission is located in the capitals of such states as have any such attractions. All towns of 10,000 inhabitants and many smaller ones have chambers of commerce or auto clubs, probably both. They will be glad to help you if you but write and give them the chance.

For example, let us say that you are planning a trip from the Middle West through eastern Canada and then south through the state of Maine and back home. That is a splendid outing for anybody, but you will need considerable information to get the best out of it.

So you pick out fifteen, say, of the largest cities along your route and write to their chambers of commerce. Tell them you want any information that will help you to enjoy a short stay in their vicinity. Don't forget the Conservation Commission of New York State at Albany. They have a number of booklets dealing with the Adirondacks, with full information on forest regulations, highways, camp sites, lakes, canoe routes and the like.

The Canadian cities will send you full information about their customs regulations and explain just how to cross the boundary without unnecessary inconvenience. The Chamber of Commerce of New York City will send you a booklet about the greatest little town in the world, containing everything the stranger could want to know, ranging from the latest shows to the average costs of living in the different boroughs. This last information, however, is quite simple to get. All you need is a few days' experience.

If you are of a methodical trend of mind, you will carefully go over this material, lay out your schedule and itinerary and enjoy your vacation with efficiency. If not, you can dump the mass of literature somewhere in the car and read it as you tour.

The Auto Club of Southern California probably has a more complete file of touring literature than any other

unofficial organization. Their booklets and strip maps of the Southwest cover picnicking, hunting, fishing, camping, swimming, yachting, golf or what have you, in every locality where recreation is found. It makes a stack on your desk over an inch thick. If you are planning to go west, by all means procure it.

If you are a member of a local auto club affiliated with the national organization, your way toward complete road and touring information will be pleasantly accelerated when you apply for it at other clubs.

Railroads publish many booklets that deal with the interesting scenic regions and, while they treat them from the viewpoint of the Pullman car, much of their material will be helpful to the motor camper who has enough nerve to ask for it.

If you wish to hunt or fish during your vacation, write to the State Game Commissioner at the capital of each state you expect to visit. He will supply you with details of the open seasons, bag limits and license requirements. If you wish to locate some good fishing or hunting along your proposed route, inquire of the editors of the sportsman's magazines. Most of these publications maintain special departments of information to take care of such inquiries.

All these data, with the maps and information furnished, will serve a double purpose. After you have used the material to round out a highly enjoyable tour, you can by its aid live over again in memory, some winter evening, your pleasures on the road!

Chapter III

MOTOR CAMPING TENTS

IF you expect to run for a hotel whenever Old Man Weather acts rough, you need not deliberate much over your choice of a tent. Almost any sort of canvas shelter will do. But if you are going in for motor camping one hundred per cent strong, you should select with keen attention to every detail what is going to be your home on the road and in camp.

Tent stakes may sound like an unimportant matter, but we had to have a tent blow down on us, one day in Montana, before we realized that a motor camper must carry in his outfit both long and short tent pegs. A quick, hard rain softened the ground and when a windstorm broke over the mountains and came howling through the little valley in which we were camping, the corners of the tent pulled loose and down she came on our heads.

There was a sad mixture of adults, youngsters, blankets and food, including three dozen fresh eggs, during the half-hour we waited, crouching under our stricken camp, until the wind died away and we could drive the loosened stakes back into the ground.

In order to give its occupants perfect satisfaction and comfortable shelter, an automobile tent should be roomy, of reasonable weight, easy to erect, well ventilated, insect and reptile proof, perfectly watertight and strong enough to withstand severe storms. This may sound like

(*Ewing Galloway.*)

Here is a medley of tent styles in a Pennsylvania mountain camp. These youths seem to have kindled their fire with a whirl stick in the Indian way.

an almost impossible list of virtues, but if you buy a well-designed tent—that is, turned out as a job of high grade, you will automatically procure them all.

Tents are similar to any other kind of merchandise. You generally get what you pay for, when you buy. If you try to save a few dollars, you will quite likely ac-

quire a tent that has been skimped in design and material, and it will give you far more trouble than your slight saving can ever balance.

On the other hand, if you pay a fair price for the best grade, you will secure an article that will deliver years of comfortable, efficient service. We have one tent that is over eight years old and, although it has been out every season, it is still going strong and looks good for several more. One saves so much in hotel bills by carrying his own sleeping equipment, there should be no inducement to conserve a few dollars with an inferior tent. You are going camping to enjoy yourself, so do not pile up any future misery through poor equipment.

The first followers of the rubber trail carried wall tents for shelter. While this is one of the oldest and most popular models for living out-of-doors, it makes a more comfortable shelter in the woods as a permanent camp than it does for the shorter stays and frequent moves that characterize motor camping. Unless a rather large wall tent is chosen, you will have too little headroom to work inside easily. The door is small, and four sleepers will not secure enough fresh air on hot nights. If you use the ordinary wall tent, you must be content with a sod cloth and separate canvas floor, which is seldom satisfactory.

In the last year several firms manufacturing tents have redesigned the wall model so that it meets more completely motoring requirements. A large door in each end has been installed and there is a one-piece floor sewed in permanently. Raising the side walls has afforded more headroom. Still, these improved wall tents do not repre-

sent the most convenient type of shelter for the motor camper. They require too many poles, stakes and guy ropes to give quick, easy erection, and it is more difficult to straighten a wall tent and get it square with floor and sides tightly smooth.

Shed-roofed shelter tents are in fairly common use. These are usually named "tourist" tents to distinguish them from the other models and they render good service under ordinary conditions in moderate camping weather. One of their main appeals is the low price. There is little headroom at the rear of these tourist tents and they require more poles and stakes than we like to bother with at camp time. They include a flap that is drawn over the top of the car and reaches far enough down to cover the windows on the other side. This permits the use of the car as a dressing room with perfect privacy; in fact, it forms a sort of two-room camp, when car and tent are set close together. It is possible to pitch this type of tent by roping it over the top of the car and doing away with poles. It is almost impossible, however, to make a neat, smooth job in this way, because the front of most car tops is lower than the back.

By far the most practical and convenient tent for all conditions of motor camping is the square, or nearly square, pyramidal tent known as the "auto" or "umbrella" style. It has the simplicity of the Indian tepee and the roomy interior of the army conical tent. It gives the most headroom and protection for its weight and bulk—in fact, it has been designed and manufactured expressly for the motor camper. You can use it for one-

night stands or can camp a month on one spot with equal convenience, so far as tent design is concerned.

These tents require fewer poles and stakes than any other model. They can be put up or taken down in a hurry. Just select your site, spread the tent out and stake the four corners, making them tight and square. Then

The "umbrella" tent (here seen from the rear) is easily put up; firmly staked, it is dry and comfortable within.

crawl under the canvas and push up the top and sides with the center pole, and camp is made. We can set ours up in less than four minutes, including the time required to unstrap it from the running board, and we don't hurry either.

Most of the time, we stake only the four corners of our tent although it is fitted with grommets in the center of

each side. The corner stakes hold perfectly well in any ordinary weather. But if we see indications of a storm or if the radio starts to sputter and growl, we sink in the other four bottom stakes and feel prepared for anything.

Whichever type of tent you select, watch for and check up the following important and desirable points. First, be sure there is plenty of room for your party. Nine of us and a dog camped one week in just a nine-by-twelve-foot wall tent and, although we made the grade, we wouldn't recommend the experience to our best friends.

For two campers the seven-by-nine-foot or the eight-by-eight-foot size is very convenient. Your bed will lie on one side of the center pole, if the tent has one, and there will be an equal amount of room on the other side to live in.

If the party numbers four, there is nothing more suitable than a tent whose floor measures eight and a half by eight and a half feet. This gives ample room for two double beds or cots and some space at the front and in the middle for baggage and for use in dressing. Such a tent will weigh about fifty-two pounds, complete with stakes and poles, and it folds up into a neat package eight by thirty-six inches that can be readily packed on any running board. The poles and stakes are packed in a separate bag of the same length and about six inches in diameter.

For a party of five or six, we prefer to carry a four-man tent like the above-mentioned size and then let the one or two extra members of the party sleep on a folding cot that stretches over the tops of the automobile seats. A

number of such car beds on the market are quite practical, easy to set up and very comfortable to sleep on.

For parties of more than six persons, it will be more practical to carry two small tents in preference to one large enough to accommodate all. A very large tent is awkward to handle, it will not resist wind and rainstorms so well and it is harder to set up, take down, pack and carry on the car. Again, there is usually trouble in locating enough smooth ground to set up a large tent. It is even hard to find a level place for the smaller sizes.

Two small tents can be pitched to good advantage with the car between, and they afford more privacy for larger parties of campers. Curtains can be furnished by tentmakers to divide any of their tents through the center, if separate dressing rooms are desired.

A motor camping tent must be well ventilated and yet constructed so that it can be closed up and made tight and secure in bad weather. Poor ventilation, skimped short windows and narrow doors are usually the signs of cheap goods and low-priced merchandise. For short trips one can get by after a fashion with such equipment, but if you are starting out to see this grand old United States of America and to see it right, you must rest well in camp, or your vacation will be turned into a nightmare of discontent. And how can you rest well if you are exposed to rain or wind or if the air over your head is stiflingly close?

Some of the nights you spend on the auto trail will be hot and stuffy. Others will be cold and snappy. Your

tent should meet both extremes in a capable manner. Be sure it has a large, wide door of good size, one covering the entire front of the tent is best. Be sure there is a window of good area at the rear to give cross ventilation over your head as you sleep. Also, be sure that both door and window are protected with close-meshed bobbinet that will exclude insects, including the tiny southern mosquito that walks through ordinary netting or bar.

In addition, both door and window should be fitted with tight curtains. The one protecting the window should be arranged so that you can close or open it from inside the tent. This feature is very useful when a sudden storm makes it necessary to close the window and it may save you some embarrassing moments. One night we ran smack into a young lady camper who had dashed out in a downpour of big raindrops to close her old-fashioned tent window. The collision didn't hurt us at all, but we're still trying to explain to the lady who pours our coffee at breakfast how we happened to be outside just then. Also we're willing to bet big money that the young lady changed to something more protective than sheer pink georgette for night camping wear.

The tent door should be fitted with a waterproof curtain wide enough to lap well over each side. This and the bobbinet screen must be fashioned so that they make a tight, secure lap. Snap fasteners set rather close will do, but the zipper fasteners used on the better grades of tents are much superior. They work swiftly and, when closed, are strong and absolutely tight.

Some tents are provided with only short lengths of tape to tie the screen and the curtain to the tent. Beware of these. They leave gaps through which mosquitoes and driving rain will penetrate. Even stray cats can crawl through the gaps, to purr pleasantly beside your pillow. If your tent is equipped with these tapes, cut them off and replace them with heavy snap fasteners every three inches. Then you can close your tent with either curtain you wish and sleep with the assurance that it is insect, weather and "varmint" proof.

A properly designed motoring tent has a waterproof floor of tough canvas sewed in as one piece with the tent. We would not care to camp in a tent minus this feature. It gives perfect protection against insects, snakes and drafts. If you camp on wet ground, you do not worry about damp beds and bad colds. The floor protects your equipment and your health. We once pitched camp on wet, muddy ground, where the water under our tent floor sucked and slopped every time we walked over it, but the floor stayed dry on top.

On that occasion we had pulled into the campground at Aberdeen, one afternoon, in a heavy rain. We found the camp a swimming sea of soft South Dakota gumbo. For that matter, the country for fifty miles in every direction was a sea of gumbo, so we decided we might as well get plastered with it right there as to move on and go through the experience later in the day. If it was sure to come eventually, we would take our medicine at once.

Out we jumped in the rain and promptly sank an inch deep in the mud. When we pulled our feet up to the

surface we saw with surprise that they were almost double their size. That gumbo stuck to the soles until we were flopping around with a sort of mud snowshoe on each foot. We pulled raincoats up around our necks and unstrapped the tent. It lit in the mud with a smack. We staked the corners, using very long pegs, jointed the center pole and slipped off our overgrown shoes before we stepped in to raise the top.

That was making camp under difficulties. But we drove the car close to the door so that the family could alight directly on the tent floor. Then we rolled a camp stove, made of an old oil barrel, close to the tent's awning. A hot, brisk fire drove away the specter of gloom that had been hovering over our camp. In spite of that inch of muddy water under our tent, the floor did not let a drop through. We spread our air beds on it as usual and slept dry and warm. Rain held us in that camp for a day and a half before the roads were safe to travel over and we often shudder to think of the camp we might have had if we had used a floorless tent.

Don't let any slick salesman sell you a tent with a sod cloth and tell you it takes the place of a one-piece floor. A sod cloth, you know, is merely a four- or six-inch strip of cloth sewed around the bottom of the tent. You are supposed to weight it down with articles of baggage and equipment to keep the wind from blowing up under the bottom of the tent. We used such an outfit once, but after we had been nearly blown off a steep hill into the Arkansas River, we voted unanimously for the one-piece floor.

Down south of Deming we camped beside a tourist with a sod-cloth tent. There the New Mexico wind blows day and night for weeks in the same direction and with the same penetrating strength. Before morning our unfortunate neighbor had almost buried his tent with the red sand he continually heaped around the sides to make them windtight at the bottom. Still, the canvas flapped and bellied dangerously and we expected any minute to see it go bouncing over the plain like a winged balloon.

You may spread mattresses and blankets directly on a waterproof tent floor and save the weight and bother of camp cots or beds. A mattress placed on the floor is much warmer to sleep on than one perched two and a half feet up in the air on a cot. With a tight floor you never lose small articles that drop out of your pockets, because it catches and saves them for you.

There should be a four- or five-inch canvas sill stretched across the bottom of the tent door. It should be taut enough to stand erect. The bobbinet curtain, when the bottom is fastened to this, becomes perfectly insectproof on all four sides.

When we first started to motor camp we used a pair of horse-blanket safety pins to fasten the screen to such a sill and we imagined our tent was securely closed. But one night in southern Missouri a persistently friendly cat nosed inside several times to bunk on our blankets. Now that cat had either been occupying a love nest of a skunk or else it had halitosis. We promptly ejected it, gently but firmly. After we had shoved it out for the fourth

time, however, we suddenly began to wonder what would prevent an equally friendly rattlesnake from pushing in the same way to warm its tootsies. The lady of the camp put on a real exhibition of fast needlework when we mentioned the snake racket to her. It didn't take her long to get a row of snap fasteners sewed across the bottom of the curtain and another at the sill's top.

Plain tent fabric, be it canvas, duck or silk, is not waterproof and will not turn aside rain until it has been treated with a waterproofing process. All first-class motor camping tents are so treated and, when new, they may be a bit sticky and will catch dust for the first two or three days they are used. But the sun soon dries off this surplus of waterproofing and the slight inconvenience, if it may be called such, is much preferable to waking up some night with rain dripping on your face.

Do not buy an unprocessed tent. In case you break camp in rain or in early morning when the canvas is coated with dew, you can roll the waterproofed material up and start out free from worry that it might mold or rot. Of course a damp tent should be dried off as soon as convenient, but we have packed wet canvas for over two weeks without any deterioration or injury to the fabric.

Most auto tents are made in olive green. This is a cool, pleasant color, durable and attractive. It is not so conspicuous as white and will not draw flies or show stain and dust so much. Brown is a color also used, but we believe that it fades more quickly than green. Either of these colors will be as cool as any other; a tent is always warm enough when exposed to the sun.

The genuine auto tent has an awning that is stretched with two poles and a pair of stakes so as to form a sort of front porch to the camp. This makes a comfortable place for eating or cooking in rainy weather or when the

(*Ewing Galloway.*)

Under the tent's awning, supported upon its poles and held by stakes, the camper can rest at ease and delight in the splendors of the landscape.

sun beats down with full force. Extra curtains can be purchased for enclosing one or two sides of the porch so that it will serve as an extra room. Where there are no mosquitoes to annoy, one or two persons can sleep here on a cot and be well protected from the weather.

If a tent comes equipped with wooden stakes, they will serve for building the first campfire. They will burn nicely, being made of hardwood, but this is the extent of their usefulness. Every camper of experience carries steel stakes in his outfit and, if his experience has been full, he provides his tent with two sets of stakes, one set about six inches long and the other twice that length.

There are good and sufficient reasons for having two sets of stakes. You will make camp on rough, rocky ground so hard you can scarcely start a stake into it. Use the short pegs here, for you simply can't do a neat job of erecting the tent if you must hook the corners to stakes projecting seven or eight inches above the ground. Again you will camp on loose earth like sand or wet gumbo. Here you need the long stake, and its holding power will be none too great. You need not carry two complete sets of stakes, but at least have four of each size to use for the tent's bottom corners.

When you camp on sandy beaches or lake shores the loose sand may not hold stakes at all and some other method must be used to anchor your tent. Use bundles of brush in place of stakes. Tie the guy ropes to them and bury them two or three feet in the sand. They will stand a pretty strong pull. Or if timber is handy, cut four small logs and notch them to form a square slightly larger than the base of your tent. Pitch the tent inside this frame and tie the bottom grommets to the logs.

All first-class tents are provided with smooth poles of straight grain. They are jointed into convenient lengths and have provision for keeping these joints tight and

solid. While for many models wooden poles are still employed, the tendency in the better grades is toward telescoping metal poles with a rustproof finish. They are strong and light. They do not split or break and the joints do not swell with moisture and stick.

Some tent models carry no center pole at all, but support the top with metal ribs running up the sides and

This spacious and elaborate structure represents tent-camping de luxe. It looks like a canvas cottage.

around the top to form a rectangle and keep the tent square. Whether you select a pole or a poleless tent is merely a matter of opinion. We have used both with perfect satisfaction. Either will give faithful service on the road and in camp.

A tent should have small loops sewed up around the top on the inside, to hold clothes hangers. Garments hung up when preparing for bed are not walked over and

creased by being spread over feet or on the tent floor.

Advice on how to pitch a tent as simple in design as the umbrella or auto tent may seem superfluous, but here are some points that we had to learn by stern experience. Just as soon as you buy a tent, take it out on the lawn and set it up. Do this several times before starting on your motor camping trip and get acquainted with the details of its erection and know where the tent poles and stakes go.

We have seen first-nighters struggling with strange combinations of canvas and rope in the face of an approaching storm and our hearts went out to them in sympathy. One fellow even got inside his tent and started to raise the top before he had staked the corners fast. This is obviously not the correct way to begin the job and there are less embarrassing ways of amusing the assembled campers who like to watch the novice make his first camp. A little practice with your tent will give you confidence and help out materially when you must make camp against time.

Try to stake the base of the tent square. Keep the corners at right angles. If there is an awning in front that is pulled out with guy ropes, you should provide a similar rope at each rear corner to balance this strain. Otherwise, the pull of the awning will gradually stretch the tent forward until it is out of shape and wrinkles and sags. This condition is the forerunner of leaking. Make the two rear corner guy ropes long so that they will not pull down on the back of the tent. Some campers procure

two poles like those that support the front corners of the awning and use them to brace up the rear corners. Shorter guy ropes can then be used.

Select the tent site with care. We don't like to make camp under a tree, in spite of the welcome shade it gives. It is better to locate the tent so that it will be shaded in midafternoon when the heat is greatest, but out from under the tree. When tents are set directly under trees, there is always danger from falling limbs that might produce a serious or even a fatal accident.

Think also of drainage. A sudden rain may flood low places before you can move out and it will turn your camp into a lake. If you suspect wet weather, dig a shallow trench around the tent close to the base. It is wise to prepare things every night as though a storm were imminent.

Pitch the tent on a level site. If the ground is high in the center, the tent pole will be too long and it will strain the tent seams. If there is a low spot where the center pole is set, the tent won't be smooth and tight. If your beds lie on the tent floor, uneven ground will cause you to roll to one side or the other.

Have the door storm curtain at hand, so that it can be closed and fastened in a hurry. Stake the front awning so that water will drain out of it and not accumulate in the center. We have had awnings fill up with small lakes, and one night the stakes pulled loose and most of that cold water was in some way dumped over our beds.

If your tent has had steady use, give it a treatment of waterproofing compound each year. Otherwise, every second season will do. This keeps the fabric pliable and

soft, in addition to maintaining the water-turning quality. The floor usually wears most and will leak first. Turn the tent upside down and scrub off the bottom with soap and water. If there are any holes in it, patch them with heavy canvas, sewing a double row of stitches around the patch with stout linen thread. Then paint on a coat of first-class waterproofing liquid.

If the sides and top need treating, set the tent up, turn the hose on it to wash off dust and dirt and, when the fabric is thoroughly dry, put on the liquid. Be sure the tent is stretched so as to be square and smooth. After a treatment, a tent will sometimes take a "set" in the form it had when treated. Some tents will shrink a little when processed, so set them up and try out the poles before you start off camping. You may find it necessary to trim down the poles a little. Do not force them into place. You will strain a seam or tear the cloth.

There are so many good waterproofing liquids on the market, the tent owner should not try to mix his own. It hardly pays to experiment with home mixtures. Some of them turn out to be greasy, sticky messes that never dry. Others are not durable and lasting. Beware of a process that leaves the canvas stiff and harsh. Stiff fabric breaks out quickly where it is folded.

Store your tent in a dry place, never in the cellar. It is best to roll it up loosely when it is stored away for the next vacation trip. Do not pack steel pegs or poles with the tent. Attention to these details will insure your getting plenty of service from your tent. If it was a good one in the first place, you will enjoy the comfort and protection it gives long after the price has been forgotten.

Chapter IV

CAMP BEDS AND COTS

THE most wonderful night's sleep we ever enjoyed on a motor camping trip was down in central Illinois, where we slept in a farmer's hay shed. We had fought mud all day, filled in ruts, jacked our mired cars out of sloppy puddles and blocked the wheels with brush, grass and fence boards. We were exhausted, muscle sore and angry. That was before Illinois got busy and lifted herself out of the mud with pavements. On that tour it took us six days to fight our way from Saint Louis to Terre Haute. We drive it now in a few hours.

Rain fell continually and we were soaked to the skin. Our tents were wet and the beds and blankets damp. No wonder we welcomed that roofed shed with open arms. We spread our beds on top of hay four feet deep and drifted into oblivion. Insomnia perched on nobody's blankets that night. All ten of us might be sleeping down there yet if the close-fisted farmer hadn't happened around at nine o'clock to collect two dollars from us for the privilege of parking in his shed.

One of the most perplexing problems in outfitting comes when the motor camper selects his beds, particularly if his car is small and his party large. There are two factors to consider and in some cases one must draw a fine line of compromise when he balances his sleeping equipment with the available packing space.

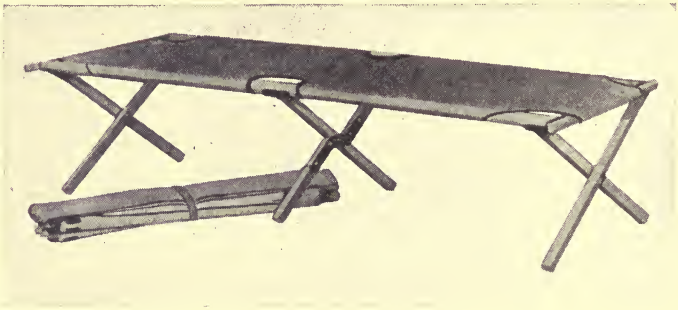
Camp beds must be comfortable. A third of camp-life time is spent in bed and unless the sleep is sound and restful, the trip will be a failure. On the other hand, there is a definite limit to the weight and bulk a car will carry. You can pile on just so much and no more, unless you wish to crowd the passengers and run chances of trouble on the road.

We have met campers who did not carry beds. Some of them slept on rolls of carpet or on blankets spread on the ground. Others would stop at a feed store before night came and buy a bale of straw or hay to bunk on. Neither of these expedients gives very comfortable sleep and neither can be classed as real camping. A bale of straw is not bad when you spread it on the ground and pitch your tent with its tight floor on top of the litter. But feed stores are sometimes scarce and hard to find at camp-making time and straw for two weeks would cost as much as a good camp bed, or more.

In any event, the motor camper should choose just as comfortable sleeping equipment as his purse will permit, keeping an eye meantime to the capacity of the car he drives. A good camper doesn't "rough" it. Roughing things is never an indication of experienced or skillful camping, but the knack of making oneself as comfortable

and happy as possible is. Select beds and blankets wisely, and you will rest as well in camp as you do at home. Some sleep even better.

The most common type of camp bed is the folding cot, with a frame of either wood or metal. Wooden cots are the cheapest to buy and formerly were about standard for any sort of camping trip. However, their limitations have curtailed their use until now only the less experi-



A camp cot that folds up into a compact bundle, easily stowed away when not in use, is desirable.

enced or those who are out for short trips use them. The wooden-frame cot is usually heavier in proportion to its capacity than are the others. Its canvas is stretched too tight to give under the shoulders and hips, and sleeping on some of them is like sleeping on a plank floor. Unless you stay in the center of the cot, you will lie over on the hard wooden side bar and not rest well at all.

Far more popular is the metal-frame cot which folds into a compact package and which was designed and

developed for the express use of motor campers. These cots are almost as comfortable as a home bed. They are strung with wire cables that run lengthwise. At the ends of each cable are coiled springs which give with one's weight and act much like the regulation bed springs.

Over these cables is a cover of stout khaki or canvas. When you purchase such a cot, examine the wires and see if they are galvanized or rustproofed in some manner. Plain wire will quickly rust and the weakened strands will break after the first season.

Both wooden- and metal-frame cots are made in single and double sizes. The double bed is preferable whenever it can be used, since doubling up means warmer sleeping and the double cot weighs less and is easier to pack than two singles.

The single cots will weigh from seventeen to thirty pounds each. Doubles weigh from thirty to as much as fifty pounds, with thirty-five pounds a good practical average. A heavier cot may be overweight from poor design and too heavy material, while anything lighter may not be built sufficiently strong and rigid to stand up under the hard use motor camping equipment receives.

All cots are cold underneath unless they are well insulated with mattresses or many thicknesses of blankets. The camper will notice this at once because he has been accustomed to a much thicker mattress at home, and his first night on a cot is apt to be fraught with chills and misery.

We have tried all of the popular ways of insulating a cot on the bottom side so that one's lower half will not

be half-frozen by midnight and so that he will not wake up wondering who packed all the ice under his bed. We have used innumerable layers of newspapers, but it takes pretty hot editions and many of them to have any effect. We have hung large, wide blankets over cots so that the edges reached to the ground, to imprison the warm air under the cot. To supply this warm air we have laid stones heated in the campfire under the draped blankets, but still we froze. All of our trials showed that there is one, and only one, practical way to sleep warm on a cot; that is simply to use plenty of blankets or mattresses under you.

The popular fancy schemes didn't deliver in this case. In fact, we are just a little suspicious and wary of clever stunts calculated to make camp life easier and more comfortable. They make interesting reading but many times they fail miserably in the actual tryout.

The best way is to lay five or six good, heavy wool blankets on your cot or to use the special mattresses that the manufacturers furnish to fit their camp beds. The mattress pads are preferable. While they are not quite so thick as a bed mattress, they provide plenty of warmth and one quickly becomes accustomed to their weight. These pads are built to fit the cots and there is no waste material hanging over the sides, as in the case of the blanket.

Camp mattresses are stuffed with kapok, with cotton and sometimes with wool. Kapok seems to hold up better, as it is more resilient than cotton or wool and packs less in use.

Some camp mattresses are built with a waterproof, or rubber, back which gives protection when they are rolled. Others have rubberized flaps and end pieces in addition, so that you can roll your blankets up inside and form a neat, waterproof bedroll to pack on the car. This kind of packing has another advantage that is highly appreciated when you make camp. You need not pull a roll of blankets out of a duffel bag and unfold

Camp mattresses are made to fit camp cots and some can be rolled into waterproof bundles for packing.

each of them. You lay the roll on your cot and spread out the complete bed, ready to use.

Be careful that the sharp ends of metal cot legs do not wear and cut through the tent floor. You can wrap pieces of auto tape or adhesive tape over their edges or you can carry sets of the small glass cups that are sold to use under stove legs. These are pretty good insurance against a leaking tent floor.

There is another type of camp bed or cot that is very popular for certain kinds of motor camping. This is the car bed, a folding cot that is stretched over the tops of the auto seats or set on legs high enough so that the

bed clears the seats. These make very comfortable berths for two. Some campers use them because they then have all the tent room to use for dressing or living purposes. Others carry this type of equipment because they dislike to sleep on or near the ground. The position up in the car seems to reassure timid campers, and these car beds certainly have their place when a party overcrowds the regular tent.

If you use such cots, fit the car windows with mosquito-proof screens so that the sleepers can enjoy plenty of ventilation. Some cots require special fittings that must be screwed or bolted at each end of the car, while others have legs just like those of the regular camp cot but spaced to fit between the seats and rest on the floor. It is rather a tight squeeze to dress up in the top of your auto but is no worse than in a Pullman upper berth.

When light weight is necessary, the easiest way to give your party comfortable sleeping equipment is to buy the air-filled rubber mattresses. They are the last word in minimum weight and bulk. You will not need cots with these beds. They are spread directly on the waterproof floor of the tent. With one or two wool blankets on top, you have a bed that for comfort and easy sleep rivals the old-fashioned feather bed and is more healthful and sanitary.

We started using these air mattresses on our third camping trip and we have stuck to them ever since. We use the double camp size that measures forty-two by seventy-five inches. Each mattress is composed of two separate rubber bags held together in a stout cover of

waterproof canvas. Although their initial cost is somewhat higher than that of cots and camp mattresses, these air beds afford a big saving in weight and bulk.

Two of double size pack nicely in one duffel bag twelve by thirty-six inches in size. Each bed weighs but fourteen pounds. Compare this with the total weight of a metal cot and cotton mattresses. The saving in weight for equipment to furnish four with sleeping quarters will be over sixty pounds. Then you save in packing space, besides. You roll your air beds in one duffel bag and pack the blankets in another—two packages in this case. To hold two metal cots, two mattresses and their blankets you would need at least four containers and most of them would be larger and more bulky than the air-mattress bag.

These air beds seem to be very durable. Ours are still in excellent condition with live, pliable rubber, although the canvas covers are wearing through in places. Given good care, an air bed should last at least ten years, possibly much longer. In between camping trips you can use it at home for a regular or an emergency bed.

The rubber ticks are divided lengthwise in long narrow compartments, to prevent tipping or rolling when you sleep. The air pressure is too low to encourage leaks and you will find that most of the wear comes through careless packing. Never pack with the beds the pump used to inflate them. It will wear through the covers and into the rubber. If a bed should leak, repair it with the "cold" patching material used for automobile tubes. In the many years our air beds have been carried and used,

we have had only two small leaks and both were quickly and permanently sealed with this material.

Somebody once wrote that an air bed would be comfortable spread over a pile of rocks. The writer obviously

A pump or lung power may be used for inflating the air bed, which should not be blown so full as to be hard and uncomfortable.

was a bit overenthusiastic. An air mattress is not an easy couch with rocks under it. It will do much toward alleviating uneven ground, but for your own comfort spread it on a surface that is level and smooth, whenever possible.

Inflation is a point to watch. You can blow an air bed up until it is as hard as a pavement and just as comfortable to sleep on. Some of the early users of these beds made that mistake and had to be set right by guidance from the factory. Our test is to lie on one side in the center of the bed. If the hip comes within half an inch from pressing through it against the ground, we have the right pressure. It is far easier to sleep on a rather too-soft mattress than on one that is overhard.

A large-barreled pump comes with each air bed and it is about a four-minute job to inflate the double size. Usually, however, our youngsters prefer to use lung power. It works faster and is good exercise. Try it for a flat chest sometime.

Air beds are not cold underneath, as some have thought. We have used them in camp when water froze in our canvas bucket by the tent door and we were cozily warm with only two blankets underneath us. It took four on top to preserve the proper equilibrium of heat.

Again, you will find the air bed very comfortable in hot weather. You can decrease the amount of padding under you until you are down to the cool rubber if you wish. On very warm nights we have been entirely comfortable with just a sheet over the mattress.

You can use these air beds on top of regular camp cots, if you prefer not to sleep on the tent floor. This keeps the bedding up out of the way and it will get less soiled. Children are liable to run inside the tent with muddy feet and to step on the blanket edges or even on the bed itself.

Another advantage that comes with the use of the air bed is the ease with which you can arouse your party in the early morning. If you want to make a quick start and get out on the highway before the roosters have stopped crowing, just slip around and loosen the air valves in each bed. It won't be long then before you get action. It might be best for you to step outside for a few

A sleeping bag with an air-bed base and lightweight woolen top is warm and comfortable. In this one the sheets and the outer covering are detachable.

minutes when those mattresses let their sleepers down on the hard ground. Reckless exposure is never justifiable.

A number of motor campers have started to carry sleeping bags, in place of mattresses or cots. Such a bag is built with an air-bed base and fitted with a top of very warm lightweight woolen material. This is, perhaps, the warmest type of bed for its weight and it may be spread on the floor of the tent or on bare ground. It is just as comfortable as the regular air mattress and warm

enough for any temperature to forty below, with extra covering in use, of course.

We have used sleeping bags on a number of trips when we carried no tent but slept in the open. This was through arid regions where rain was unusual. As the sleeping bag is very light and compact it can be adapted to any kind of camping, besides motoring—back-packing, horse-packing, canoeing. It is ideal for them all. The sleeping bag is good, too, for children, as they cannot kick their blankets loose and expose themselves to chill.

Motor campers should carry wool blankets of good quality for bedding. A tent is always cooler than your home at night, for the cold air clings to the ground and settles about the low camp bed. A good blanket allowance for air mattresses is two blankets to lie on and three as a cover; for metal cots using a mattress pad, one blanket underneath the sleeper and three for covering. Rather thin blankets are more practical than those of very heavy weight. They are easier to adjust to suit the temperature.

Air pillows are most popular, since they roll up into pocket space when deflated; or small house cushions covered with stout material may be used and will be useful for day resting in the car as you travel.

Sun and air the blankets regularly. This prevents the accumulation of dampness, and hardly any amount of covering that is damp will keep anyone warm. Spread the blankets out in the sun or, in the case of prolonged bad weather, start the cookstove going in the tent and hang up the blankets near by, one or two at a time. This will drive off a surprising amount of dampness.

(*Ewing Galloway.*)

Blankets that have been aired in sunshine or, in damp weather, kept dry by stove heat will furnish warmth for the sleeper.

If any members of the party object to having wool next to them, it is better to use cotton fleece blankets of light weight. The bedding can be rolled up in separate waterproof duffel bags or inside the rubberized mattresses, as described before.

A party of two campers will have plenty of room in their car for a metal cot and a regular mattress. Four campers with limited baggage space cannot do better than choose a pair of double air beds. Four in a good-sized car can pack two metal cots and the necessary bedding, but there will be plenty of bundles to find places for.

Five or six campers can use two air beds and one car cot and have a minimum of duffel to take care of. It will be necessary to consider your car's capacity and the amount of money you wish to invest in camp goods before you select sleeping equipment. Our advice is to play safe and secure the most comfortable and the lightest. Cots and mattresses will doubtless be used from time to time in the home when the regular bedrooms are overtaxed, so their full cost need not be charged up as vacation expense alone.

Chapter V

CAMP STOVES AND COOKING KITS

THE only mean thing we remember doing as motor campers was to shanghai a wooden fence picket from a garden fence in sunny Arizona. Wood was as scarce as fulfilled preelection pledges after the votes are cast, and we carefully picked up every stick and bit of board along the trail and carried them in the car until camping time.

Small folding gasoline stoves were not on the market then, and all our meals were cooked over open fires. In the desert and arid regions we had to watch out sharply for fuel half a day in advance, or we went to bed after a cold supper. After discouraging attempts to burn greasewood and green sage, we dug dead cedar roots on the mountain sides and carried a small bundle of them each day. They blacked our cooking pots and our faces as well until we looked like well-smoked sides of bacon, but they kindled at once and gave a fierce heat.

If we ran out of cedar roots, we boiled water for our tea with bunches of buffalo grass and cow chips. In those days it was a real job to keep a party of motor campers

well fed and satisfied. We hope the owner of that outraged fence will be consoled by knowing that his picket came to a worthy and useful end. It cooked a half-gallon of tea and heated up two cans of beans for us on the evening of our departure from grace.

On one tour we cooked our way across the continent and back with only a small folding grate to serve as our stove. It was light and convenient and undoubtedly was the best thing we could have had for cooking over an open fire. Occasionally, though, we overloaded this grate in our hungry zeal and, when the coffeepot and the kettle of spuds were too heavy for its slender legs, they folded up in passive nonresistance. Those were sad moments when we watched the hot food fall down to smother our fire.

Since the introduction of the gasoline camp stove, we have used the open fire only to sit and muse before or to serve as an auxiliary for light cooking when the stove was overcrowded. The open fire has a certain romantical attraction but it appeals most when the stomach is well fed. We heartily enjoy such a blaze when the stars are out and coyotes yelp on the ridge behind our tent. A wood fire will do nicely to toast bread, hot dogs or steaks; but when it is necessary to stop the clamors of a bunch of hungry motor campers, the folding gasoline stove's the thing!

When you use this stove, you need not wait for wood to burn into coals. You set things on the burners and start business at once. A stove has none of the romance of the open blaze, but romance is a darned poor filler of

(*Ewing Galloway.*)

The folding gasoline stove, lifted on extension legs, makes camp cooking a simple process compared with the open-wood fire method of earlier days and broadens the menu.

empty stomachs, and who ever saw an outdoor cook getting a thrill from scouring sooty cooking pans?

This camp stove that has put so many cooking difficulties on the spot burns ordinary gasoline. You fill it from the tank of your car and you need never worry about finding wood or camping in places where open fires are taboo, as long as your car is at hand. Fuel is plentiful and cheap.

Pressure is built up in the gasoline stove by a few strokes of a pump. Some models carry pumps built in; others use a separate article much like the old-time bicycle hand pump. When you have pressure, you flood the generating cup, burn off the raw gas and in a few minutes a clean, hot, blue flame is generated.

When managed properly, this flame will not blacken the bottoms of the cooking kit. The pressure must be kept about even. Too much air blows the flame out or sidewise from the center of the burner. Too little lets the flame go out or gives a sickly yellow blaze. Still, only a little experience is necessary before a good cook can turn out just as good meals in camp as she does at home.

The gasoline camp stove folds into a compact package. Some of the smallest models, when packed, will measure only three and one-half by eight by fourteen inches. The weights vary, according to size and burner capacity, from nine to twenty pounds.

Two- and three-burner models are available. Do not try to get along with an undersized stove. A party of two will find the smaller two-burner stoves very satisfactory, but four campers need more cooking space and capacity

and they should carry the largest double-burner model. The burners will be wider in diameter, with larger flame area. They accommodate larger pots and heat them up more quickly.

For more than four, select the three-burner variety. Nobody likes to wait and eat at second table when motor camping. A hungry man is seldom patient and a poorly fed one is usually disgruntled and gloomy. "Feed the brutes and keep them happy" should be the motto of the successful camp cook. Even if only a moderate quantity of food is being prepared, time can be saved by using the third burner to heat water for washing the dishes and the travelers.

The modern gasoline camp stove is practically foolproof. It is not dangerous to handle and it operates for months without trouble. It is necessary to watch a few points, one being the use of plain gasoline and not the colored mixtures containing lead. These usually clog the needle valve and the fuel pipe and cause grief until the sediment is removed. Care must be taken not to overflood the generating cup. If, after a small quantity of fuel has been run out and burned off, action will not start, then the process should be repeated. Some of the later models have special blast starters that do not require generating but start off at once.

Two quarts of fuel will keep a two-burner stove running continuously for six hours. That means a high degree of economy. You will scarcely notice any difference in the mileage your car delivers when you fill your camp stove from its tank. To avoid waste and aggravation,

use a small siphon for filling. The stovemakers supply them and they are designed expressly to draw gas from the auto and convey it to the stove tank. Also, one of these is just the thing to use when the vacuum tank of the car runs dry.

Gasoline for fuel in the stove can best be drawn from the car supply by means of a small siphon.

A folding stand to hold up the stove at a comfortable working height should be used. It costs only a small sum and takes the backache out of camp cookery with surprising efficiency. It is much more comfortable to work over a stove thirty inches above the ground than over one sitting directly on it. The stand keeps stray dogs and cats from sniffing at the food and anybody who

gets excited at the last minute before mealtime cannot step on the stove.

We consider no camp stove complete unless it is equipped with an oven. Some stoves carry a built-in oven; others must be used with a separate baking tool. Both types fold flat and take up very little extra space. An oven is mighty convenient for keeping food warm just before mealtime, as well as for use in regular baking.

An oven means the enjoyment of a wider variety in camp meals—getting away from the usual diet of flapjacks and fried foods and conserving both digestion and disposition. We bake muffins, biscuits, pie, cake, corn bread, meat loaf and various other dishes in our camp oven. In fact, we are able to turn out in camp practically any dish that we could prepare at home.

A motor camper who rides all day and eats bakery bread and fried stuff is usually bothered with constipation. When this tendency appears, we correct it with panfuls of bran muffins, following the recipe on the bran package. They are not a bit hard to take when a handful of raisins has been mixed in the batter. In fact, the most confirmed hypochondriac would reach for our muffins and ignore his pills. Our oven permits us so to vary our camp diet that we seldom need resort to medicine.

We bake the muffins in individual cups that we have removed from regular muffin pans. We advise others to follow our example, as these cups nest together, taking up scarcely any room in the cooking kit, and they may be set in the frying pan or on a plate when used in the

oven. Other kinds of food can be baked in the heavy aluminum frying pan or in a small kettle with a lid.

We first appreciated the possibilities of our oven when we toured across northern Indiana. Up among the hardwood hills we passed many groves of sugar maples. The sirup season was just over and, since we like to try

A camp oven, which can be used over an open fire or a camp stove, is of the greatest value for baking foods in camp.

as many local delicacies as we can, we purchased a quart of the sirup as a starter and began to work the oven overtime baking biscuits. Buttermilk was available at farmhouses near each night's camp. We knew then what we had missed in the years of camping without the oven. When we tired of biscuits, we started in on muffins, corn bread and nut bread.

The main thing to watch in camp baking is not to burn the roast or the bread. The manufacturer supplies a flat baffle plate to set over the burners and to spread the heat out away from the bottom of the baking pan, but even with this the food is liable to be burned. When we bake, we use two plates filled with sand, one sitting over each burner. These spread the heat, sending it up along the sides and top of the oven and so giving a more even job of baking.

We made up our first camp cooking kit from odd pans and pots picked up at ten-cent stores along our route from Pittsburgh to El Paso. This outfit was fairly serviceable, but the individual pieces were not exactly designed for camp use and they could not be packed compactly nor did they fit the burners of our stove, when we later acquired one. So, as soon as we could, we threw away these irregular pieces of tinware and bought one of the regular nested camp kits. These kits are designed especially for the motor camping trail.

Nested outfits are made up in two different metals. There is a choice between enameled ware and aluminum. Enameled steel will be heavier and there is a chance of its chipping with use. It is the least expensive ware. Aluminum is generally the motor camper's choice but a wise cook looks carefully at the skillets to see whether they are heavy and thick so that the heat will spread evenly and quickly over the bottom. Otherwise, the morning flapjacks will stick and burn and the party will refer sarcastically to the cook as a "wet smack," when it comes to tossing in the food. A heavy cast-

aluminum skillet is a sweet tool for hungry folks to work with and is decidedly superior to the thin sheet-steel frying pans supplied with cheaper kits.

After many years of experience with both metals, we decided upon aluminum. It is easily kept clean and

A nested kit of aluminum cooking vessels and utensils, made for motor campers, saves space, time and temper.

bright in camp, which is no small matter. But for perfect satisfaction two changes must be made in the regular outfit. In the first place, an aluminum cup is an abomination to drink hot liquids from. The metal gets just as hot as the liquid and you burn your lips unless you wait for the coffee to cool down. For this reason, remove the aluminum cups and substitute enameled cups with

handles open at the bottom so that they will nest and stack together.

The other change is in the matter of forks. Aluminum forks are soft, so that they bend out of shape and the tines wedge together. For the camp kit buy some cheap plated steel forks at the dime store. You don't want to be handicapped with poor tools when the cook shouts, "Come and get it or I'll throw it out!"

There are camp skillets supplied with detachable handles that work like a pair of pliers. You detach them while the pan is over the flame and keep them cool. They may be used to lift any hot utensil from the fire.

Should aluminum ware get sooty and black, scour it bright with sand. Keep salt and acids away from it, and when packing the kit, separate the larger pieces with paper towels so that they will not rub. When aluminum chafes, the surface is covered with black marks that must be scoured off before it can be used for cooking.

A four-party camp cooking kit consists of three pots of ten-, seven- and five-quart capacity, each with a tight lid and a handle, a coffeepot, two heavy skillets, knives, forks, spoons, plates, bowls and cups for each person, together with salt and pepper shakers. Everything except the two skillets will nest inside the biggest pot and they fit over its bottom. This makes a compact outfit that fits in a waterproof canvas carrying case. The complete set weighs but ten pounds and measures eight and one-half by ten and one-half inches when packed.

We prefer to store the cutlery in a small Canton flannel roll with pockets for the different pieces. Then when we

break camp, a quick inspection of the roll shows whether every pocket is filled or whether we have lost or missed something. To complete such a nested kit there must be added a thin-bladed, sharp, slicing knife, a large stirring spoon, a can opener and two long-handled toasting forks with detachable handles. It is better to take also a set of measuring spoons, for nobody likes to eat salty oatmeal or meat stew any better in camp than at home. Those small spoons save guesswork on the part of the cook. Now, with all these conveniences, we are outfitted to give Old Man Hunger the air when he peers in at the door of our tent.

The longer we motor camp, the more eager we are to adopt any device that will save labor in the routine of preparing camp meals. When we undertake long tours we use rather a novel utensil for preparing hot noon meals for the party without having to stop and set up a cookstove. These hot noon meals are particularly desirable when we travel in snappy weather, and this is the way we cook them.

We carry a steam-pressure kettle, built to use the heat from the exhaust of our car. It provides well-balanced meals for us as we drive. We do not have even to watch our dinner as it cooks, and when we draw up at a roadside picnic spot, we eat without delay.

This steam cooker is clamped on one side of the rear bumper. No drilling or fitting is necessary. Two clamps hold it rigidly in place. The cooker itself is simply a conventional steam-pressure kettle of heavy aluminum such as many cooks use at home. It sits in a metal can

with double walls and lid. This can is connected to the end of the car's tail pipe by a length of flexible tubing. A valve regulates the amount of heat sent between the double sides of the heater.

With a steam-pressure cooker on the rear of the car making use of the exhaust, the meal is ready when the campers stop to eat.

We load the aluminum kettle with meat and vegetables. (A shallow rack and an insert pan help to separate the different foods while they are being cooked.) Then we set the kettle in the heater and turn on the heat valve. It takes about forty minutes' driving to get up pressure and then from a half to a full hour of driving to cook the meal.

The kettle is equipped with an automatic safety valve and a steam gauge in the lid. It is necessary to experiment a little to find out the exact time needed to produce the heat, as different cars develop more or less exhaust heat than others. A few trials will tell exactly when to start the cooking process in order to have the food ready at mealtime.

Cleaning this pressure cooker is not so difficult as might be supposed. All that is needed is to wipe it clean with paper towels, put in a cup of water and drive on. The steam generated will clean and sterilize the kettle and another wiping later on completes the kettle-washing job.

Soap that lathers well in hard water should be carried for washing camp dishes. If the skillet is covered with grease, it can be wiped with paper and put back on the stove with a little water, to boil clean. A metal scouring ball is almost indispensable around camp and is more sanitary than a dishcloth. A rubber plate scraper cleans off plates and mixing bowls in a hurry. These are small items, but they count as big things in the work of washing camp dishes.

Chapter VI

PRACTICAL CAMPING FURNITURE

BESIDES your tent, cots, mattresses, stove and cooking kit, you must provide a few other articles of equipment to make your motor camping life smooth and comfortable. With the shelter, sleeping and eating duffel selected, you have already accumulated a fair amount of weight and no little bulk, so select additional items with a stern eye to absolute usefulness and light weight.

It is easy enough to overload your car at this stage of the outfitting game. We made one long western trip with Old Man Overload sagging our car springs, and it was a nightmare of grief and aggravation. Be warned by our experience and shun all patented contraptions that dazzle your imagination but suggest a doubt of their working out right. If you can't resist their lure, buy them but forget to pack them when you load up to leave home. Carry only reliable, sturdily built accessories and camp furniture that will serve you faithfully and serve you in the greatest number of ways.

In Vermont we met a camper who carried a big ax to split kindling and a smaller one to drive in his tent stakes. That was bad enough, but then he opened his toolbox and brought out a combination monkey wrench, wire cutter and stretcher, leather awl, vise and hoof nippers. We didn't have the heart to ask him how many wire fences he had built or how many horses' hoofs he had trimmed, on his motor trip, for we saw that this tool was his favorite camping "medicine" and he would scarcely have enjoyed his trip without it. But if you feel that you must have a camp fetish or medicine, in your interests pick something that fits your shirt pocket.

The motor camper needs a light ax to make kindling for his evening fire, to cut wood when he cooks over the brick or concrete stoves found in many camps and to drive tent pegs. Unless he strikes off through wilderness trails into rugged lands where roads are bad and the weather rough, one of the steel pocket-size camp axes will suffice.

On earlier trips we carried full-length double-bit axes, but then we were obliged to cut our own detours through the timber around bad mudholes and to chop up logs and limbs to corduroy those we couldn't detour. The big ax is necessary for this sort of touring. We have done so much road-repair work in Texas, Oklahoma and Arkansas that we claim the right to live within their boundaries tax-free for years to come.

Fortunately the modern motor camper will find smoother highways than we did then and he will

seldom need a chopping tool larger than the pocket ax mentioned. This ax weighs less than two pounds and is provided with a lead-lined guard to protect the blade when it is packed in the car or stuck in one's pocket. For anyone who prefers a larger ax, there are the

(*Ewing Galloway.*)

This housewife assembles under the tent awning her folding table and seats and a capacious cabinet for ice, food and other household necessities—a small kitchenette.

belt or camp models with handles from sixteen to twenty-four inches long. A leather sheath for these axes should be provided as a matter of safety.

On motor camping tours we always carry a folding table. A table turns a "grab-it" lunch into a satisfactory meal. Nobody can completely enjoy his food when balancing a plate of hot beans on one knee and a

cup of coffee on the other. Eating from the ground is a hardship and a source of worry. The youngsters may get hilarious and step in your plate or the dog may steal your bacon. All this keeps a fellow on a strain at the very time when he should relax and be happy.

Camping tables are inexpensive and light. There is a choice of metal or wood—both types rigid and sturdy. A table large enough for four to dine from weighs about fourteen pounds. The cook, in particular, will appreciate a table to work on. If she insists on using the table as a sort of kitchen cabinet when preparing meals, it is best not to argue with her but either to eat from one's lap or to buy another table.

There should be a stool or a chair in the outfit for each person. People get tired standing about waiting for mealtime or bedtime, even if they have been riding all day. The running boards usually are too full of stuff to be used for seats and sitting on the ground is comfortable only for the Indian. Chairs with rigid backs should be selected for adults. Youngsters can get along well with stools.

There are folding armchairs and even rockers that fold compactly. A chair with arms and a back is most comfortable for middle-aged campers. Even the cook will appreciate one when she sits down to peel potatoes. Folding armchairs will weigh as little as thirteen pounds and chairs with backs only, about six. A comfortable stool can be purchased for less than two dollars and will weigh less than two pounds.

A very handy combination is the set of one table with four chairs that several manufacturers put out. Table and chairs are built entirely of steel and will give many years of camping service. They fold and nest together in one package. When the outfit is closed up, with the chairs inside the table, the package is only three inches thick, thirty long and fifteen wide. It will lie flat on the floor of the tonneau without interfering with the rear passengers' comfort.

A broom is very handy in camp. We carry a regular house broom with the handle shortened to fit inside our steel running-board carry-all box. It is used daily to sweep the tent floor and the floor mats and running boards of the car. A little attention with the broom will do much toward keeping your outfit and your person presentable and clean.

We first appreciated a broom when we stayed in the camp at Boise, Idaho. The atmosphere was very dry and a thick layer of dust covered every foot of ground. The city sprinkler ran in twice a day and wet things down but this helped for only a few minutes. Needless to say, everyone tracked in pounds of dust and the broom was kept busy. When we broke camp, we swept everything clean and then, as we folded the tent, each fold was swept clean until, at last, we lifted it free of dust on to the running board. Without that broom, we should have carried a lot of Idaho campground with us when we headed for Portland.

If there is no room in the outfit for a full-sized broom, the next best thing is to buy a toy model that is fairly

efficient. Even a stout whisk broom is better than no broom at all, although sweeping out a large tent with one is a tiring task.

Folding canvas goods are very practical and convenient. They are light and nest into a small space. One should have a set of canvas or khaki wall pockets to hang up inside the tent to hold toilet articles and small things needed when dressing. They can be procured from camping-goods dealers or can be sewn up at home. Another good gadget is a folding cupboard made with thin wooden shelves and canvas sides so that it collapses like an accordion into a flat package. This can be suspended inside the tent or under the front awning, near the stove. Like the set of wall pockets, the cupboard can be purchased or made at home.

We always carry a folding canvas water bucket and a washbasin. They weigh less than a pound each and tuck away in any small corner. They hold water just as well as metalware does. Some campers use a canvas basin with three long legs to hold it up, table-high. This saves bending and is easy on stiff backs.

Folding bathtubs made of waterproof canvas are available. They hold water enough for a real bath, yet are sufficiently light and compact to justify their presence in a motor camping outfit. However, we have not carried a tub for many years. We always find a shower in any of the larger camps, and Saturday night on the rubber trail is no more bothersome than it is at home.

To handle perishable foods, the motor camper has a choice of several devices. One is the small metal ice refrigerator that sits on the running board or in the tonneau. Well packed with nonconducting material, these refrigerators have compartments for ice and food and do their proper work as long as ice is procurable. It usually can be had in cities and the bigger camps, some of which furnish ice to their patrons as a part of their service, while others permit deliveries by the local ice companies.

Refrigerator baskets are carried by many campers. These are stout baskets insulated and lined with metal. They will stand a lot of hard knocks in camp and in the car. An ice can is set in one end and perishable foods are packed in the remaining space. One filling will keep the contents of these baskets cool through the average summer day. Lettuce stays crisp and tomatoes solid, milk sweet and butter firm.

For long trips, when our road takes us away from regular sources of ice supply and we don't care to use time in hunting them up, we use what is called the iceless refrigerator. This is a galvanized-metal food box covered with a loose jacket of hemp cloth. There is enough room between the box and its jacket to hold four gallons of water. This refrigerator cools by the principle of evaporation. Water seeps through the jacket and keeps it wet as you drive. It works to a double advantage, since both water and food are kept at a cool temperature.

This refrigerator fastens to the running board with two clamps. It is filled from the top, and there is a

petcock at the bottom to draw off water. The food box is opened by a hinged metal lid.

These devices are appreciated most in touring desert country. No ice is used, nor is much water used up by the cooling process. When we crossed the Mojave, we found plenty of water along the highway but since most of it had been shipped there, it was hot and stale. Garages that supplied our needs had signs that read, "We Shipped This Water 20 Miles. Don't Waste It!"

You can imagine the temperature of water sitting out aboveground in a steel tank exposed to the desert sun. When we drew it through the twelve or fifteen feet of iron pipe laid on top of the hot sand, it was just about right for a Turkish bath.

But our refrigerator handled the situation perfectly. After we had driven fifteen to twenty miles, the hot liquid had cooled down until it was pleasant to drink. And this was in midsummer too. Butter in the iceless refrigerator never got soft enough to run.

For packing smaller quantities of water the one- and two-gallon South African bags are all right. They work on the same principle, evaporation, and cool their contents as long as they are exposed to a free circulation of air. But these bags should not be hung on the back of the car, where most people do hang them. They pick up dust there until the pores of the fabric are filled and they cannot function.

The insulated thermo jugs are very useful for carrying liquids. These jugs keep their contents at the original temperature for hours and are equally adapted to carrying

(*Ewing Galloway.*)

The camper's lantern is ready to go to work when daylight fails; the stove on its low, folding stand is already doing duty.

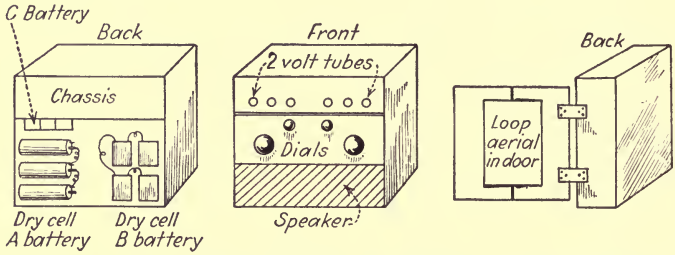
iced drinks or hot soup or coffee. We have filled them with hot stew in the morning and enjoyed a warm meal at noon without starting our stove. Breakfast cereal cooked at night, put into a jug that has been preheated, and wrapped well with newspapers or a heavy coat, will be ready to eat when the sun rises.

Some sort of camp light is necessary. Even if we make camp before dark, we like to sit and talk or play cards before we retire. A detachable spotlight that can be carried from the car inside the tent solves this problem pretty well. Otherwise, it is well to carry one of the pressure gasoline lanterns that throw a wide brilliant light, rivaling the strength of electricity.

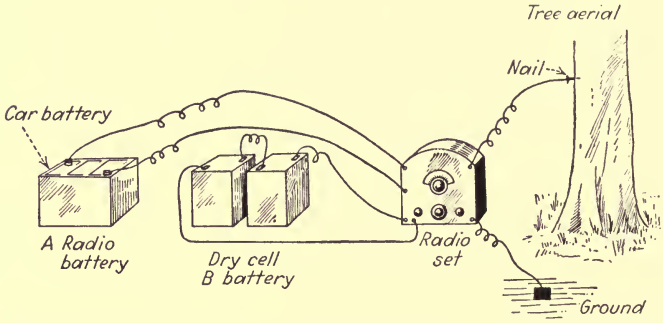
In addition to the regular camp light a flashlight with a strong battery is needed, to be kept where it can be seized up quickly in the night. The pocket flash under one's pillow is the best remedy for an emergency that demands instant illumination at night. Two flashlights are none too many for a party of four or five and every member would be justified in providing himself with a small vest-pocket model, in addition.

Many motor campers equip themselves so that they can enjoy radio music and entertainment in camp. Some with a mechanical trend of mind have adapted the home set to camp life by installing the units in a portable case to set inside the car. The storage battery of the car is used for the "A" battery and the aerial is simply a wire strung between two trees or just laid on the ground. A short metal rod driven into the earth provides the ground connection. In handling such an adaptation, one must

be careful of the tubes. They are safer carried outside of the set in padded boxes such as they are packed in when sold.



There are portable radio sets especially designed for the camping tourist's convenience.



The home radio set can be adapted for camp use by such an arrangement as that shown here.

Other campers use regular portable sets designed especially for camp use. These are very reliable and not in the least a compromise of limited power. Although rather heavy, these portable radios are compact and strongly constructed.

In the past few years a number of automobiles have been offered with radio equipment as an option and at extra cost. Everything is built in and takes none of the car's inside room. The dial control is close to the driver's hand on the dashboard and, if he is an accomplished one-arm driver, he can tune in as he speeds over the road. The aerial is strung inside the top of the car and the set is carefully shielded from all interference from the electrical system.

In the mountain regions particularly the clean, thin air and absence of power lines and local interference permit a magnificent reception. There is a big thrill in sitting under the awning of the tent and listening to the world's latest music and news, watching the while the flames of the campfire shoot out against the black night that threatens to smother its light. If possible, camp with a radio. But remember, there may be some folks in camp who have driven hard all day and who want to turn in and sleep about ten o'clock. They will take it more kindly if at that time the jazz is turned down or completely shut off.

Chapter VII

SPECIAL LIGHTWEIGHT OUTFITS

TWO youths in a puddle-jumper rolled into our camp on the old Oregon Trail at exactly ten minutes before six o'clock one evening. The confident way in which they swung their feet over the fenderless, topless and a-few-other-things-less car showed us that the world was their oyster and they knew it.

The boys stretched their legs a few times, remarking audibly that the camp would be O.K. if it wasn't so full of stuffed shirts. Then adding in resigned tones that they reckoned they could stand it, they pitched in and unloaded what we have always remembered as the lightest motor camping outfit we ever saw on the road. They had it packed in a burlap sack and the pockets of their sheepskin coats.

At exactly three minutes before six o'clock, their pup tent was up, the blankets spread and a fire blazing under a battered coffee can. Seven minutes to make camp and get supper under way! We made a mental list of the things in their outfit. They were both light and limited.

Their shelter tent weighed probably five pounds. They slept on a rubber tarpaulin and two wool blankets. Another blanket covered them. We noted how they carefully dug small hollows in the ground where their shoulders and hips would rest. A coffee can and a skillet were the cook's only tools. That was camping à la Coxey with a vim. These boys had knocked the tar out of Old Man Overload in the first round. They were enjoying their hurdling, bucking tour across the West in care-free nonchalance.

In contrast, we remember a heavy seven-passenger car, hauled into Cody with a broken axle. We saw the car standing in the garage and marveled how the family had ever wedged themselves in. There was baggage heaped to overflowing in both compartments, besides a regular array of tents, poles, water jugs, kitchenette, axes, etc., that the mechanics had unloaded in order to have room to work. They looked as if they were outfit-poor. They must have bought everything in duplicate so as not to run short, and we pity whoever was responsible for getting the lot safely together.

There come times when the confirmed motor camper wants to strike out over some highway unhampered with equipment—times when he wants to do just as little camp work as possible and spend his time in travel. Perhaps he is going somewhere in a hurry and wants to save hotel bills and carry his own sleeping equipment. He has neither the time nor the inclination for regular camping and he looks around for a sort of compromise that will work.

We all are that way at times. We would probably go out on more short week-end trips if we didn't have to hunt up the outfit and load it in the car. Some snappy autumn morning we may decide to run a few hundred miles on short notice. A light, easy way to solve the sleeping and eating problems would be very acceptable then.

One will save the most by carrying sleeping duffel, if it comes to a choice between that and cooking kits. Hotel bills are considerably harder on the purse than lunch-stand meals, so it is just as well to plan first on cots and blankets, if economy has an important bearing on the question.

The problem of some compact easy-to-handle motor bed has been solved by campers in many ways. Years ago, a favorite trick was to take a hacksaw and cut the back of the front seat across about ten inches from the tonneau floor. After the upholstery had been retacked the seat was fastened in place with two hinges at the bottom and two snap bolts at the top. At night this seat back was let down until it lay level with the rear and front cushions and the three formed a very comfortable bed.

The first contrivance of this kind that we ever saw belonged to a couple who pulled into the capital camp at El Paso in a sandstorm, one Easter morning. We had come over the bad country west of town the night before and had escaped the full force of the gale, but this elderly couple had been caught in the center of the howling storm.

We watched with admiration the thorough way in which they cleaned outfit and car. The lady shook out every blanket and unpacked each garment from suitcases. Each piece was brushed and shaken to remove any sand that might have blown in. The man went over the car's chassis with a cloth and kerosene. He even loosened up some of the front-end bearings to clean them and took off the front-wheel hubcaps to examine them for sand. Finally, he washed the interior—the seats, the floor, under the cushions and the inside of the top.

Our partner for life stood close by. "Nobody ever saw you do those things," she remarked. We tried to pretend we didn't hear, but it wouldn't work. Then as we started an alibi, the elderly man reached into the car, unlocked the back of his hinged seat and laid it back. His wife was ready with the blankets, and in two minutes their bed was made.

That saved us. "If we slept like that, we could work on the car too. As it is, we spend all of our time making and breaking camp." Which wasn't exactly true, but it went over anyway.

In late years tourists and campers have not been so keen about sawing off the backs of their car seats. It is easier, and about as economical, to buy one of the car beds or cots that lie over the seat tops. These were described in a previous chapter. A sawed seat means more depreciation when the old car is traded in. It sometimes seriously cuts the value of a used car.

If you drive a coach, there are fittings on the market that can be substituted for the hinges on the divided front seats. These fittings allow the seats to fold backward to the floor. By reversing the rear cushion to make

(*Underwood and Underwood.*)

In the Nash Lafayette sedan there is provision for a full-sized bed, quickly and easily made up, while the rear seat, swinging up, forms a clothing shelf, similar to those in Pullman cars.

it more level and by placing a suitcase or a duffel bag at your feet to lengthen the bed, you have a roomy, comfortable couch, without any depreciation.

We know a number of salesmen who cover their territory during the summer with cars fitted up to furnish sleeping quarters. They pull into a campground,

spread out the car bed and sleep snugly under their own blankets. This materially reduces the expense account, but whether they turn in the price of a hotel bed to the company auditor we don't know. We do know that it is possible to fit up any five-passenger car to serve as a practical sleeping room.

For those who do not care to sleep inside the car or for those driving roadsters or coupés, there are several models of light tents that will pack in a suitcase but are large enough to give plenty of room for two. These tents, remember, are only large enough for the bed. They are low and small and cannot, like the regular umbrella tent, be used as living quarters; but they weigh almost nothing, can be put up in a minute and for sleeping only are quite practical.

For this purpose our favorite tent is the cruiser model. It weighs eight and one-fourth pounds and is equipped with a bobbinet door screen and a ventilating window at the peak. It has a waterproof, sewed-in floor and a small awning to shield the front. Really, it is a miniature edition of the regular auto tent. All that it lacks is more room. But it has a floor space of five by seven feet, which nicely holds a double air bed. The peak is five feet high, which gives you as much room to dress in as does a Pullman berth. We wouldn't care to be housed in one of these tents with a pair of youngsters and a dog on a rainy day, but for going light they satisfy.

Metal telescoping poles are used for these tents. A short ridge and two outside sheer poles are required.

Four stakes are enough to hold the bottom securely. The tent is so low that it offers little resistance to wind and one need not worry about its blowing down.

The most practical bed, of course, for this kind of shelter is the air mattress. A cot would stand too high for the amount of headroom. The complete outfit of tent, mattress and blankets can easily be packed in two suitcases or one large duffel bag. It can all be thrown in the back of a roadster or a coupé and still leave room for clothing. If the car is left for fishing or sightseeing, there is nothing on the exterior to tempt itching fingers. The outfit is locked safely out of sight.

And nobody need know you are camping and sleeping in your tent, in case you want to keep that dark. If you are afraid some of your wife's friends would high-hat you, don't show the duffel. Of course there's no reason for anybody's feeling that way, but you know how it is with some folks. There is nothing in or on your car when you go light like this to distinguish you from any traveling man.

So far the problem of camping and sleeping has been solved in a satisfactory manner. The total load of tent, air bed and blankets will not weigh thirty-five pounds and will accommodate two persons. For a party of four you can carry two cruiser tents or one tent and a bed to fit inside the car. Still you have a very light load, one that can be packed in the rear trunk of a car.

The problem of preparing meals is still open. If you want to prepare them yourself on the road, save a few dollars and enjoy your food as only a fellow who cooks

and eats outdoors can, this is the way to do it. You could carry a regular camp stove and a nested cooking kit and their weight would not be too great to allow the complete outfit to be classified as a lightweight one. But for short trips of a week or less, we have the stove racket faded.

We carry no cooking utensils whatever. We do have a small bag with waterproof lining that holds a dozen paper plates, paper cups, knives, forks and spoons, a slicing knife, a jar each of butter, salt and mayonnaise and a can opener. This is all we need to rustle up some dandy meals on the road.

Sometimes during the day we stop at a good food store and look over the canned-goods shelves. We buy a can of chicken à la king, or chile con carne, corned beef and some mixed vegetables, in case fresh salad materials are out of season. Usually, however, we pick out a head of lettuce and some ripe tomatoes. We also buy buns or rolls.

An hour before mealtime we stop the car and wire one or two of the cans of food to the hot exhaust manifold of the engine. Then we drive on until an hour has passed and stop at some roadside picnic ground. They are scattered all over the country. In mountain country we like to stop by a spring. In settled districts many gasoline stations provide small yards or groves where motorists can lunch and camp.

We put on a pair of canvas gloves, seize the can opener and open up those hot cans of food. Their contents are ready to eat. In fact, they are usually too

warm to handle comfortably. We open each can cautiously, with a small hole at first to let the steam escape; otherwise the hot stuff might spurt out and burn our fingers. Paper plates are handed around and everybody helps himself to the hot food and makes his own salad.

Don't turn up your nose at canned foods. They are delicious out on the motor trail, and through careful choice in purchasing furnish plenty of variety. There are cans of roast chicken that make a hit anywhere, cans of baked ham, many varieties of fish, Vienna sausage, soups, corned beef that is entirely palatable even without the cabbage, and numerous vegetables, such as tender green beans and peas that can be heated and served with butter.

Balance these canned foods with fresh vegetables and fruit at each meal and you will travel comfortably fed and happy, without once bothering to light a stove or wash dishes. Get this last, you weary sisters of the kitchen who enjoy a trip the most when the common task of dishwashing is omitted. No man will have the slightest trouble in persuading his wife to go camping if he mentions this point to her.

We eat these roadside meals from paper plates and drink from paper cups. If you like a hot drink, you can have it. Get a tinsmith to build a small tank that can sit at one end of the exhaust manifold of the engine. This will heat water hot enough to make tea, instant postum or instant coffee, although the water will not boil.

When the meal is over, wipe the cutlery with paper towels. Dip it in warm water from the car's radiator and wipe again. Burn the paper plates, cups and towels. Your work is done; you have cooked no food, washed no dishes, but you have dined heartily on hot palatable

(*R. I. Nesmith.*)

A roadside meal with fresh vegetables and mayonnaise for salad and fresh fruits, including watermelon in season, can be most refreshing and satisfying.

food and feel at peace again with the world. You close the small bag that holds your meager outfit and start on your way.

Use plenty of paperware. Paper towels are especially useful in this sort of cooking on the run, as it were, and their use saves packing linen, which will get soiled and must be washed out and dried.

The exhaust manifolds of modern automobiles get very hot in driving, and there is no reason why this heat should not be used to advantage by the tourist. Some manifolds are long and flat and provide room for several cans at once. Ours will hold four. If the manifold is not easy to get at, search around until you locate some hot surface that will do instead. The side of the motor block near the top or the exhaust pipe will do. Wire the cans in place with soft stovepipe wire. Remove the paper labels first, to prevent any danger of fire.

It is not necessary to limit yourself to canned foods when you tour without a stove. Build a small fire and roast hot dogs or chunks of steak over the coals. You won't even need toasting forks, although they are very handy. Cut some slender green sticks along the road and impale your meat on them. There are plenty of ways to get by comfortably on the road if a fellow wants to dodge camp work for a time, or, in other words, to take a camping vacation from motor camping.

We suppose you have thought that going light must mean roughing it. We have tried to show you that it does not, necessarily. Roughing it will not fit in with a pleasure tour. We've seen folks on the trail who claimed that they were having a whale of a time roughing it with only a small outfit of equipment, but a close scrutiny would show a strained look or two about their eyes. If you follow our suggestions, you can go light and have just as good a time as the fellow who lugs a loaded trailer behind his car—for short trips we mean, for these compromise methods do not apply to regular, leisurely camping and motoring.

Chapter VIII

MOTOR CAMPING CLOTHES

WE have noticed this. At any other time when we plan to go somewhere my wife demurs and complains that she has nothing to wear. But when we run the car out of the garage and begin to look up the tent and the camp cots, that old excuse is never sprung. We find the lady all ready to take her seat in the family bus when the packing is done, and she's all dressed for the trip, too—plenty of clothes with nothing missing, so far as we can see.

There is no unvarying uniform for the motor camper. Take a good look over any large camp and you'll see that anything and everything is being worn. Here's a family fitted out in costumes that remind you of a Palm Beach wedding. The members of the outfit next door to them look as if they were on their way to a hard-times party. Nowhere else will you find a greater example of American independence and democracy than among a group of motor campers.

Women's costumes, in particular, show a remarkable variety. Some of the ladies look as if they had just come

out of a strip poker game, while others appear to be on their way to the North Pole with a hard winter ahead. But the sensible way, the one followed by the majority, is to strike a happy in-between course. There is plenty of leeway in the business of outfitting yourself and the

First of all, camp clothes should be comfortable and easy to wear, durable and washable. In a group of camp neighbors there is likely to be little uniformity as to garments, as may be noted by looking through the illustrations in this book.

family for a good time on the road and in camp and no excuse for extremes.

Of course there won't be much use for the "tux," so it can be laid away in moth balls until we come back. On the other hand, a fellow doesn't have to start out looking like a tramp—something the head shack just routed out of an empty car in the yards. He can keep clean and neat and retain that typically American pros-

perous look through all the hazards of the rubber trail with ease if he is outfitted properly at the start.

The right clothing will naturally depend somewhat upon the nature of the trip planned. Our experience has shown that motor camping tours may be divided into broad classes and that each requires clothing especially selected to meet its peculiar conditions.

If we expect to spend much of our time in wilderness camps or to tour through mountain or forest country, we dress in regular camping clothes of khaki or some other typical outdoor fabric. On such a tour we get plenty of exercise and some of it may be rough and strenuous. We want garments with a trim, snug fit and cut, that will foster activity and give confidence to tackle any camp or roadside job, such as chopping wood, chasing a skunk or a porcupine out of camp or jacking the car up from a mudhole. And we want garments that will least show stains and dirt, something easy to launder and of a material that will wear like iron. Further, camp clothes must be comfortable and easy to wear.

The camping, hiking or hunting suits manufactured for outdoor sports meet these requirements splendidly and they should be seriously considered for this kind of touring.

On the other hand, if the trip will mean camping in big-city or resort-town camps and the driving is going to be over pavements, we find a sports costume more appropriate than regulation camping clothes. Something you would wear out for an afternoon of golf would be right—sport shoes, knickers, golf hose, a sport jacket

and a hat to shade the eyes. In fact, we would say that a man or a woman dressed for the links would need only the addition of sweater and raincoat to be ideally outfitted for these less rigorous motor camping tours. Unless you have given the subject some thought, you might be surprised to know how similar the clothing requirements of golf and motoring are.

Let us consider in detail the individual garments appropriate for each of these classes of motor camping trips. For the western tour or one up into the Adirondacks, with some rough going, plenty of muscular exercise, a possibility of bad roads and the making of solitary camps in mountains or desert, we have found the following outfit practical and convenient.

For men, a camping suit of khaki, canvas or whipcord, the suit to consist of riding breeches fitted snugly at the knee and a belted coat with plenty of pockets. If one prefers, he may omit the coat and use instead a sweater and a wool or a leather jacket. Shirts should be flannel. Even on the desert a wool shirt feels comfortable the day through. We like shirts with two pockets fitted with buttoned tabs. Plenty of pocket room is needed, and these shirts provide a safe place for carrying the small articles that campers like to have at hand.

There are numerous good-appearing, hard-wearing fabrics of low cost that make practical camp suits. Khaki is the prime favorite. It is quite economical, and when a garment is badly soiled the owner can afford to toss it overboard and buy a new one. Khaki color does not show travel stains or dust readily. Its only bad feature is

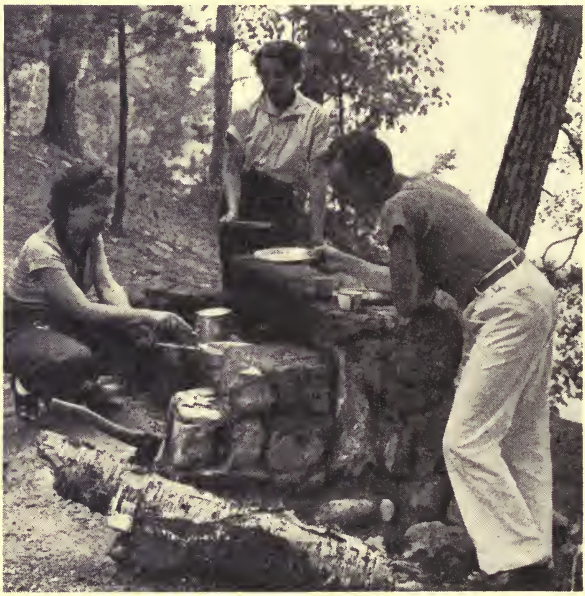
a tendency to shrink, unless the garment is guaranteed preshrunk. The lower priced khaki clothing should be bought large enough to allow for this take-up, unless cleaner's naphtha is used instead of soap and water when blue Monday rolls around.

Whipcord is an admirable camping fabric and is popular with those who have tired of the more common khaki. Whipcord is stouter and will stand harder wear and, of course, sells for a slightly higher price. Garments of more costly fabrics like forestry cloth, gabardine, Burberry, twills and tweeds can be purchased at sport outfitters for both men and women in all of the sport styles. Men have a choice of long trousers, knickers, or breeches.

Waterproofed hunting suits are often worn by motor campers, and their weather-turning properties make them mighty comfortable on wet, rainy days. They wear like iron and do not absorb grease and dirt so quickly as other materials, because the waterproofing process has filled the fibers of the cloth. Such suits are only slightly more expensive than common khaki and are well tailored and neat in looks. Their only fault is that they feel rather cold to the skin in cool weather, particularly about the knee, when riding breeches are chosen.

The amount of money that one wishes to invest in sport clothing must be his guide in making a choice of these materials. Tailor-fitted cords are very desirable; but a worn business suit, provided it is not too badly worn and is still serviceable, makes a comfortable camp costume, and we find many men in camp and on the

highways so clad. Don't let the lack of special outdoor clothing keep you at home or spoil your anticipation of good times on the road. Many of the styles and materials



(*Philip D. Gendreau, N. Y.*)

These young campers, ready for a meal cooked in the stone fireplace, appear to be clad for a summer holiday, not burdened with garments of wool.

we mention are intended more as suggestions than as arbitrary check lists that must be followed and adopted.

There has been a lot of bunk handed out about the proper clothes for camp life and perhaps the worst of it is that old gag of wool underwear. Many writers on camp life advise us to wear nice scratchy woolens, even

if we are starting out on July Fourth. But we laid that ghost years ago.

Lightweight wool is all right when you camp or tour in the winter, late fall or early spring, or when you visit high altitudes or states in the extreme north in summer. For such trips we might take a chance with the "woollies," but they are too uncomfortable for the average motor trip in the regular vacation season. Even a good one-hand driver can't scratch while touring. Men should always vote the straight cotton ticket when it's time to elect camping underwear. You can always put on more outside wraps when the temperature goes down, but there is a decided limit to the peeling off you can do when the mercury mounts!

Anyone motoring in summer will always run into hot weather and the business of packing a lot of arctic underwear is a big mistake, unless one is unusually delicate or susceptible to catching cold. This is a mistake made also by many big game hunters who forget that the open season in game regions occurs often when the prevailing weather matches our Indian summer. No wool for us—our scanties for summer touring are of pure cotton!

For rough camping and touring we are partial to leather puttees. We have read a few wisecracks about them that call them stiff and uncomfortable, but this also we regard as bunk. We have driven 500 miles a day in perfect comfort with leather "putts" on our legs and we can do it again. These puttees are no hotter than canvas leggings, wool spiral puttees or heavy golf stockings. They protect the legs from chill in cold weather, and in

warmer seasons when the rest of the party are slapping mosquitoes from their ankles, we sit immune and smoke the old brier in peace.

Puttees give a trim, clean-cut feeling that is appreciated in any active exercise. They are handy in other ways as well. If a strange dog prowls about the tent door at night, we snatch up a puttee and heave it at him. Many nights in camp, when pillows were scarce, we have laid our head on our rolled puttees covered with a coat. In rattlesnake country we never worry about snakes or snake-bite remedy if we wear them.

But if puttees do not strike your fancy, you can substitute heavy golf hose and stout Oxfords. This is still a neat, practical combination with riding breeches.

On your feet wear broad-toed army-last shoes of soft leather. Get them of ordinary height—do not handicap yourself with high, laced hunting boots. High boots will rub your heels and the lacing process keeps you in the tent when everybody else is out eating breakfast.

Shoes should be well broken in before you begin your tour; otherwise you may be miserable and uncomfortable. The driver, in particular, should be careful about his shoes, since his feet are always exposed to the heat driven back from the car's engine.

If you must start out with new shoes, you can break them in so that they will never bother you. Put them on over a pair of wool hose and stand in shallow water until the leather is well soaked and soft. Then walk over dry ground briskly until the shoes are perfectly dry. Give them an oiling with neatsfoot or any good leather

dressing. They will be stretched and shaped to fit your feet exactly and will remain comfortable throughout their life. For camping it is wise to buy a size somewhat larger than your regular dress shoe.

Shoes with rubber or composition soles will keep your feet dry when the grass is wet with dew; but be sure that your feet take kindly to these soles, which are softer than leather and offer less protection to the bottom of your feet.

For extra warmth you will need a sweater or a jacket, possibly both. The sweater is mighty handy to slip on when the mornings are snappy and, if a very cold night catches you without sufficient blankets, the sweater worn over your pajamas will take the place of an extra cover.

Jackets of leather give the most protection for their weight, but be sure they are finished with a waterproof tan. Suède jackets soak up water and are rather soggy and miserable. Perhaps the most practical material for motor-camping jackets for the money is the heavy wool windbreaker fabric. Fitted with the zipper fastener, such a jacket will prove ideal under all sorts of weather conditions. It can be jerked on or off in a hurry as the temperature changes.

There should be one or two raincoats in every car. One might be of the featherweight fishing-shirt style that rolls up into pocket size. Such a rain garment can be shoved down in a door pocket of the car. Then there should be a long slicker of heavier material, one that comes down below the knees and fastens up tight at neck and sleeves. This feels mighty good to the unfor-

tunate who must jump out first in the rain and stick up the tent for the rest of the party.

For rough trips women will wear garments made of materials similar to those favored by their masculine companions. Our advice apropos of wool underwear should prove especially acceptable to them. Just try to get your wife or a flapper daughter to start out touring in woolen undies. If you can persuade them to this, don't waste your time selling bonds or automobiles. You belong in politics.

The woman camper has several types of serviceable costumes to choose from. Knickers, riding breeches and sport suits are all suitable for a western tour and she should certainly be able to please herself with some of these. Some figures take more kindly to the snug-fitting riding breeches than they do to baggy knickers. One of the most fascinating sights we saw at Yellowstone, several years ago, was a two-hundred-pound woman in over-size knickers. Another was a slender colleen with red hair in unusually well-fitted breeches. Of course the basic reasons for our interest were not alike in the two instances, but our point is that in the array of typical camp clothing a woman can find the style that becomes her best.

If the more common khaki suit of blouse and riding breeches seems too ordinary, there are available neat tweed and knit suits that sell for as low as ten dollars each. Such a suit will consist of coat, skirt and blouse, or coat, skirt and thin slip-on sweater. The fabrics are pleasing, and colorings that do not show and accentuate travel wear may be selected. The roughly knit material

(*Ewing Galloway.*)

From the wide variety of attractive, serviceable sports clothes now available, a woman camper can choose what suits her purpose, her purse and her person.

will stand much harsh usage before it appears in need of pressing.

Both sexes should wear hats that shade the eyes and face and prevent sunburn. You can leave them off when you want to be tanned, but you will appreciate a wide-brimmed hat in crossing the desert regions of the West. Even the seashore sun will get in through the car windows and be extremely uncomfortable unless your face is well shaded.

A felt hat will serve for a man—something that is no longer good enough for dress—or he can procure one of the waterproofed hunting hats in tan or olive green. They are comfortable and practical. For women sport hats are available in either straw or felt. So long as the article is comfortable and protective, it will do.

Shoes are an important item for women. Many women have trouble with their feet when they take up any unusual form of sport or exercise. While there is not much walking in motor camping, our advice to women is: Wear what you are accustomed to wearing at home as far as possible. Do not begin a long trip with an untried model or type of shoe if your feet are sensitive. Before you have gone very far you'll be in the same fix as Will Rogers' dinner guests—their slippers were all kicked off under the table before the cocktail course was removed.

Some women can use tennis or golf shoes. Others must stick closely to the conventional street shoe and will find a walking model with broad heel more comfortable.

Let the children wear what they would play in at home, no matter what type of trip you choose. Give them

all the chance in the world to be happy and comfortable. Their garments should be stout, with well-sewed seams, for on a long tour an active child can run through his clothes with distressing speed.

On more conventional tours, with stops at well-equipped camps and few opportunities to wear rough

This boy is dressed for the day's tasks, games and adventures. He looks comfortable and at home in the camp setting. Note the netting that screens the doorway.

things, you can, as was stated before, use golf clothing. In case you are not up on what is proper in order to follow the game—which is not impossible, for a few men still depend upon regular work, like sawing wood, for their exercise—here are some pointers.

Sport shoes (Oxfords are best), golf hose reaching to the knee (get them plenty loud, if you don't want to be

a horse and wagon), knickers and a windbreaker jacket. This makes a nifty setup for the motor trail. If you have a plus-four suit, take knickers and a coat, or leave the coat at home and substitute a sweater and a jacket.

It should be easy for women at this stage of the game. They probably already own sport suits, as you well know. You may still remember the bills; some of them are hard to forget. If your wife is minus a sport suit, don't worry. Just slip her a few bills and say, "Honey, run along and shoot the works for some new scenery." She'll do it and probably bring back more stuff per dollar than you thought it possible to buy. Mine can, all right.

Women at the larger resort camps by no means restrict themselves to golf costumes. They appear to be entirely comfortable in costumes that run from shorts to beach pajamas. The latter, especially, are quite the vogue and, when they are properly displayed on the right types, we enthusiastically favor them.

Have sunsuits for the little tots and take a swimming suit for everybody in the party if you are going to visit any beach. Dips in the water will be enjoyed as some of the high spots of the trip.

For night wear we favor heavyweight pajamas, since a tent is always cooler than a house. If your feet get cold in the camp bed, carry light woolen socks to wear when you sleep. For cold ears have a knitted cap or helmet. These little things, which are necessary for some people in order that they may completely enjoy their rest, should by all means be provided.

Chapter IX

FOLDING TRAILERS AND CAMPING CARS

ONE of the first camping cars we ever saw pulled into the schoolhouse yard beside our tent the first night of our first motor camping trip. It was a large houselike affair built on a light truck chassis, and inside we noticed many articles of furniture one hardly associates with camping out. There were a kitchen cabinet, a dresser, a writing desk and a phonograph. None of these were portable camping models but full-sized pieces, such as are used in a permanent home. It was a pretty heavy load.

The next morning we had a chance to see just how heavy it was. When the party started off, two men put their shoulders against the rear and shoved mightily until the clutch began to hold and the outfit rumbled slowly over the smooth yard in low gear. We have often wondered what this party did when they got out west where not only men are men but grades are grades. We suspect an impromptu auction sale of household goods was held at the bottom of the first steep incline. There was hardly any other way out of it.

Motor camping equipment has followed the law of evolution. Some of the earliest campers used very crude outfits. A tarpaulin or canvas sheet served for a tent, a bundle of straw for a bed, or the camper slept on blankets spread on the ground. The cooking kit consisted of a coffeepot and a skillet. Later on special camping furniture was designed and auto tents with folding beds, gasoline stoves and nested cooking kits eased living on the road. Now we find many tourists living and camping in trailers and ultra-comfortable camping cars.

It looks as though many who follow the motor trails faithfully each vacation time sooner or later graduate into the group of trailer and camp-car users. At least we have noticed a steady increase in their number wherever we go. So if your mother-in-law dislikes to sleep in a tent and still persists in going with you when you motor camp, get a trailer and preserve harmony in the home!

One type of trailer is a two-wheeled folding bungalow, with canvas sides and roof, which unfolds to make a comfortable roomy camp. It is equipped inside with built-in beds, cupboards, a table, an icebox and clothes lockers, and there is considerable storage room for personal duffel, such as guns, tackle and golf clubs. The trailer is pulled behind a pleasure car.

The camping car is built along the same lines, only more so. Some models are quite pretentious in their fittings—and their price. The camping car does not fold up or down, but is built with rigid sides and top, usually of light plyboard covered with canvas or auto-

top material. Sometimes it is built on a two-wheeled chassis like the trailer, with a special hitch to fasten on the rear of a car. Other models are constructed directly on the chassis of light trucks or powerful pleasure cars. The camping car—called a "caravan" abroad—will go the trailer several better with its Pullman-type beds, sink with running water, electric lights, refrigerator,

In this camp car de luxe the beds on the sides fold in on tour, a water tank is carried on the running board and clothing is folded away in a trunk.

radio and living-room furniture. The driver usually sits in a comfortable wicker chair instead of on the regular automobile seat cushion.

Either trailer or camp car is virtually a summer home or cottage on wheels and you can move anywhere you wish to go that is reached by passable roads. A trailer costs considerably more than a first-class tent outfit and the camping car runs into more money than a trailer, but both have exclusive advantages appealing

to many campers to whom they are worth the extra cost.

Both trailers and camping cars have been greatly improved in the last few years. As now made they are lighter, stronger and roomier and have added conveniences; and they may be handled faster and more easily behind the car. In fact, a good trailer will give practically all the comforts of home while traveling, and at only a slightly higher cost.

In the past everybody regarded a trailer hitched behind a car as an anchor or a drag. The safety element was also disputed. At their first conception, the use of trailers was restricted to the eastern part of the country and only occasionally did we see one out west among the Rockies.

Then people thought that a trailer could not be pulled up bad grades, but the idea that the trailer camper must have a very powerful car has been exploded. Grades no longer bother these travelers. We have seen the smallest four-cylinder cars topping the Shoshone Canyon road grades leading to the Yellowstone, with trailers behind almost as large as themselves. Trailers are found in every camp now.

In some cases a trailer may pull no harder than the same amount of camping equipment would pull if loaded directly into the car. After it is started, the average trailer requires a pull of only some twenty-five pounds to keep it rolling over smooth roads, and it will track at all speeds. We have tested out trailers at a speed of seventy miles per hour behind our car, and

they followed along without a sign of wobble or swerve. Anyone who must go any faster than this would better get a cabin monoplane and fit it up for camping.

Some experience is necessary in order to manage a trailer in backing up. You must learn to turn the front wheels in the opposite direction from what you would swing them if you were backing just the car. Keep the trailer's wheels tracking with the car's front wheels and not the rear ones, take your time and go slowly. Sometimes when we are in a hurry to turn, we drive to the side of the road, jump out, disconnect the trailer, then swing it about by hand. The trailer hitch is quickly disengaged and the trailer itself is neither too heavy nor too clumsy to handle in this way.

The trailer outfit increases difficulties in parking and in finding parking space and, of course, is not so mobile as is a car alone. When driving over rough country, you need to accelerate a bit sooner to get over grades on high and, when descending, the brakes need to be applied sooner and somewhat harder. The trailer camper should drop into a lower gear and use the compression of his engine to help take care of the extra push a trailer gives when coming down steep mountain grades.

Passing traffic on the road with a car and a trailer is but little different from what it would be in driving just a car. You can't pull in ahead of other vehicles quite so soon, but we have noticed that the road hog has a wholesome respect for the trailer and he invariably swings out farther in passing it than is his usual custom.

The advantages of a trailer or a camping car over a tent outfit are obvious. Anyone who takes long vacations finds one of them ideal as a camping home. Much less time is required to make and to break camp. You can stop your trailer anywhere you wish and pay no attention to whether the ground is rough or damp. It is all the same to the trailer. Most of the work required to set one up can be done inside without exposure to the weather. You need not wade through mud or work in the rain with stakes and guy ropes.

The beds in a trailer or a camping car are ready-made. You can crawl into them without opening blanket bags and unfolding covers. There is room inside for cooking, eating and dressing. In the aisle between the beds is space for a folding table. Use the edges of the beds for seats and eat or play bridge in comfort under the light of the electric bulb above when the storm rages outside. At the rear of this aisle are an icebox, space for a stove and a food cupboard. Under the beds there is storage room and some trailers have closets in the corners big enough to hold clothes on hangers. Besides, room can be found for four or five suitcases.

Some trailers are ingeniously arranged so that the icebox can be filled without being opened up and out. Food can be stored in the cupboard in the same way. The beds are of full size, fitted with regular bed springs and mattresses and just as easy and comfortable as home beds.

The trailer automatically solves the problem of storage space. In camping with it, there is no need of carrying

anything in the shape of baggage in the car. Every inch of space there can be reserved for passengers.

Most of the models use four extension legs which drop down, one at each corner, to make the camp rigid and secure when the trailer is detached from the car. These legs permit setting the outfit on rough or uneven ground. The usual procedure is to drop down the front extensions, then unhitch the coupling and, lastly, level the trailer by adjusting the rear legs. If the trailer floor gives or shakes when anyone walks inside, it is not properly leveled. The wheels on both sides should be blocked with small stones or pieces of wood. Some models are fitted with guy ropes to stake out from the four corners as added safety precautions.

There is little chance of a trailer's tipping over on the road or in camp. On the highway the weight is carried very low and a trailer will not upset as easily as the average car. Set up ready for use, it will stand any storm that a tent can weather, besides a few that a tent cannot.

We had a most convincing example of this fact when we camped on the seacoast one July Fourth. Our trailer was disconnected from the car and set close to the tide marsh separating us from the Atlantic, when out of a clear sky and without warning a windstorm suddenly hit us. We had just time to close all of the window flaps when a cold rain, driving across the ocean at a speed of fifty miles an hour, deluged the camp.

Although our trailer swayed a little in the force of this gale, we never once worried that it would tip or

roll over. In fifteen minutes the storm was all over and, looking out over the camp, we saw the havoc it had played. It had raised the very devil with every tent there. All were down flat on the ground. Even the toilet buildings were tipped as efficiently as though the night before had been Halloween. Tents, beds, blankets and campers were soaked.

The ground was sandy, and we suspect no one had been foresighted enough to use extra-long tent pegs to hold the camps secure. But that was as exacting and severe a test as we could want, to prove the stability and safety of our trailer.

By this time you are probably getting ready to ask, "Why bother with tents at all if the trailer is so good?" Brother, our answer comes easily. Why don't we all ride in sixteen-cylinder cars instead of worrying along with less piston deplacement, as we do? The same answer applies with equal accuracy to both questions.

About $350 is the minimum price of a well-designed folding and completely equipped trailer. Some models run as high as $500. A complete camping-car body will cost around $800 and you can pay as much as you wish on cars built to your special order. With good care there is only a small amount of depreciation on camping cars and even less on trailers. The chassis of your camp car will of course depreciate as fast as that of a pleasure car, but the chassis of the trailer is good for many seasons.

The only wearing part is the rear axle. If this is lubricated frequently, the bearings are good for hundreds

of thousands of miles. The frame and the wheels are very sturdy and capable of holding up a far heavier load than will be carried. A new canvas top or cover may be needed after five or six years of steady service, but the cost of this is moderate.

A trailer or a camp car covered with auto-top material needs regular painting with a good grade of top dressing.

The folding trailer, unfolded, can give considerable comfort as a camp home, especially when extended by a large awning.

Do this every month while the traveling home is in use. Treat the canvas sides and top of folding trailers with tent waterproofing liquid each season. These attentions will prevent much of the usual depreciation in both.

The folding trailer weighs from 700 to 1,000 pounds. Camping cars will run up to a ton or more, exclusive of their chassis. Needless to say, the lighter the job is, consistent with good material, the better it will respond

to handling on the road. A trailer will increase the gasoline consumption of a car anywhere from nothing to twenty per cent. Some users claim it makes no difference. Our experience is that the trailer reduces the gasoline mileage of a car some two miles to the gallon.

When you select a trailer, be sure that the beds are of full size and comfortable. With all the leeway a trailer-maker has in his favor, there is no excuse for a narrow, hard bed. See that you will be sure to get plenty of fresh air on hot nights. A trailer usually has less headroom than a tent, and unless there are plenty of good-sized windows and doors it may get pretty stuffy and close for four persons in midsummer.

All the openings should be fitted with fine-meshed wire screenings, woven to turn small mosquitoes and flies. There should be, in addition, canvas shutters to close the openings against rain and still leave space for fresh air to enter. Some of the best models make provision for this with storm hoods over doors and windows. Doors should be provided with locks so that the camp can be locked in the same way as a home. Then it can safely be left at any time.

Get good balloon tires on your trailer. Some makes can be supplied with wheels to take the same tires as your car, but unless your tire size is medium or small and unless you travel many thousand miles per season with the trailer, this expense seems unwarranted. The smallest size of balloons will give much service. The chances are that the rubber will go to pieces from age faster than from actual road wear. Don't consider

hard, airless tires or hard-pressure tires. Get balloons and you will move along through mud and sand without useless effort.

A spare tire for the trailer is advisable for a long tour. If the rubber is new and your trip rather short, you can get by with a spare tube or even a small vulcanizing kit to take care of a chance puncture; but for crossing the continent we recommend a complete spare mounted on the trailer.

Have grease nipples similar to those on your car fitted to the trailer. One grease gun then takes care of both; and don't forget to use it regularly. Do not depend upon a homemade hitch bar. Get one from the factory, preferably one with a spring insert to take the shocks and jars resulting from quick starting and stopping. The hitch should be perfectly secure and yet easy to loosen. You don't want to struggle with a complicated fastening when the rain is pouring over your shoulders, neither do you want to lose the trailer at the top of some long mountain grade.

When some folding trailers are packed for the road, they are lower in height than the rear window of the car and do not interfere with the driver's use of his rear-view mirror. Others stand up almost as high as the car itself, even when folded in for travel. If you select this type, be sure that it is provided with glass windows in front and rear so you can see through them and keep informed on rear-coming traffic. Some of the older high trailers were not so equipped and the man at the wheel had to look back around their sloping sides and to drive more

or less blindly so far as any knowledge of what was behind was concerned.

Some of the newer models do not have sloping sides that taper nearly to a point at the top but are as square and wide as the car. These are fitted with windows through which the driver can look back at the road behind, but for additional convenience, a pair of stand mirrors should be installed on the tops of the fenders or on side-mounted tires. These mirrors will give both the driver and his front-seat companion a clearer view and, when used with the regular rear-view mirror, will help to spot a speed cop burning down upon the car with the accuracy of a hawk locating a baby chick.

A trailer must have a taillight and should be equipped with a stop signal that lights up when the brake is applied, warning rear motorists that the car is stopping. We prefer a rather strong bulb in the stoplight, something brilliant enough to wake up a sleepy driver. A trouble lamp with enough cord to reach clear around the trailer is regular equipment with several models and very handy for night use.

Trailers will be found well adapted to middle-aged campers who dislike any strenuous camping exercise or probable exposure and who prefer when on the road to live as easily as they can. For fall or spring trips in snappy weather trailers afford mighty comfortable camping. They are splendid for undertaking long trips to California or Florida or for long stops at resort towns, lakes or streams. The summer cottage is hitched

right behind the car, and many tourists who visit in southern climates for the winter live throughout their stay in their trailers and never worry about renting apartments or bungalows.

Not all camping trailers, however, are of the folding type fitted with beds, table and kitchenettes. There is another model, very popular with motor campers who are confronted with the problem of carrying a large family in a medium-sized car. It is the regular two-wheeled cart with rubber tires and a box that many use for hauling boats or light loads.

The average five-passenger car is more comfortable on a long tour when it carries only four adults. If it is necessary to haul five persons and a number of suitcases besides, somebody will get crowded before the trip is over. Motor campers with seven-passenger cars and every seat full will find one of these common trailers very useful for carrying the camp duffel. So will the five-passenger camper who carries a complete outfit with him.

Such a trailer, purchased new, will cost about forty dollars without tires. If you wish, you can pay a couple of dollars for a Ford rear end at some car-wrecking yard and make your own. The job is neither long nor difficult. Leave the rear end intact, only removing the drive shaft. Bolt a second torque tube on to the first to lengthen it and provide a longer tongue. Remove the short leaves of the transverse rear spring, leaving the four long leaves. These are plenty for such loads as you will haul in the trailer.

Now make a thick paste of concentrated lye and coat the metal surface of the rear end and the wheels. After this has loosened up the old paint and grease, turn the hose on and wash the whole thing clean. Then paint the chassis with black paint.

A two-by-six-inch hardwood sill is bolted to the spring as a foundation for the box. Any blacksmith can forge out the necessary fittings to make the box and its clamps, or you can procure them from firms specializing in parts for homemade trailers.

Build the box preferably of hardwood and about forty-two inches wide, sixty inches long and sixteen inches deep. This will carry eight hundred pounds of camping duffel, or all the equipment a party of five or seven has any business lugging along. Brace the box with angle irons and use bolts in assembling it. Plain nails will pound loose after a few hundred miles of rough road.

Paint the box with several coats of implement or auto enamel, put new tires on the wheels, and you have a neat contrivance that will give much service. It makes little difference whether the wheels take demountable rims or clincher tires. The trailer will be light and any camping duffel you load up on it will be easy on the rubber.

Make a waterproof cover for the box, using heavy canvas or, better yet, auto-top material. This will protect the outfit from road dust and water. It is surprising to see how much can be packed in one of these compromise trailers, as we call them. After the camp

stuff has been loaded, there will still be room for a boat on top, if the tongue is long enough, and on the tour the craft can be used for fishing or pleasure riding. We have a good friend who pulled one of these trailers on a two-year motor camping trip, and it proved to be very satisfactory.

Forerunner of a modern trailer. On a Ford chassis is set a camp-car body light in weight, with sides of beaver board and windows wide enough to admit plenty of light and air.

We have met a number of campers who built their own camping cars. It seems hardly practical to try one's hand at constructing a folding trailer, for the folding machinery has to be designed and built, but there is ample opportunity for any handy man to make his own camping car. Starting with a good sturdy chassis, he can construct a regular house in miniature, using plyboard for the sides and setting in his windows like casements, opening

outward to provide room for tight insect screens. The plyboard may be painted or covered with canvas.

The builder can let his ingenuity run riot in fitting up the interior. He can construct permanent bunks or sling hammocks across the ends. Taking a tip from yacht builders he may, if he wishes, build berths like those used in cruisers and motorboats. An auto gas tank can be used for water supply and a small air pump can be fitted in, to give pressure for running water. The car can be fitted with a miniature kitchen, a stove rack, cupboards, closets and a toilet.

Before starting out with your trailer or camp car, procure the proper license for it, have tail and stop lights working properly and ask your insurance man what effect pulling the device has upon your regular automobile insurance. You may be surprised at his answer, as we were.

We found that our insurance was voided when we pulled a trailer, unless we procured additional insurance to cover it as well as the car. We found, further, that the cost of property damage and personal liability, insurance every tourist should carry, came to only three dollars for the average pleasure trailer and, when we had bought this, there was no question about the validity of our car's coverage.

Fire and theft insurance on trailers will cost about a dollar and ten cents per hundred dollars of valuation and should by all means be carried. If your outfit burns up or if somebody hooks on to it and pulls off when you are away someday, you will be protected against

loss. If you wish to insure the trailer against damage by collision, this will cost about twenty dollars. These rates apply to pleasure or camping trailers only. We have gone into detail to this extent because we believe that a number of trailer campers have neglected to set themselves right on the matter.

Chapter X

CHOOSING AND USING A TRAILER COACH

IT is unfortunate that so much written about trailer coaches has been in the form of mere blurbs emphasizing the pleasures of touring and living in them. The trailer prospect needs more substantial fare. The chances are good that he is already sold on the idea of trailer travel. He knows all about its convenience, economy and flexibility. He is more concerned with the facts that will help him to choose the best coach for his purpose, one that will give him and his family the most satisfaction with the least depreciation in value.

The buyer of a trailer must consider depreciation just as surely, if not to the same extent, as the man who buys an automobile. Trailer investment runs very close to the cost of popular cars. Someday the owner may want to sell or trade his coach and replace it with a more modern type or a size more adapted to his changed requirements. If he bought wisely, this would be possible without his incurring too great a loss. If not, he might be tempted to follow the course of certain tourists we

have met in large camps of the South and the West who were trying to dispose of unwisely bought coaches at a fraction of their original cost.

We hope that the information following will help some of you to make a wise choice and that you will select a coach capable of serving satisfactorily and economically for years to come.

With height and width of trailers practically standardized, the prospective owner of one should carefully consider what length to choose.

First, a warning about size! Don't make the common mistake of buying a trailer that is too small. Have your eye tuned for future expansion. Your family may increase, your desire for recreation and sports may expand so that you will need more room for both passengers and baggage. The man who buys a ten- or twelve-foot trailer today invariably wishes he had

something larger and roomier after a few thousand miles of travel.

Fortunately, trailer heights and widths are practically standardized. The only dimension you must decide upon is length. We believe that fourteen feet is the minimum length for any practical trailer to house two travelers. We would never buy one shorter. For three or four persons the trailer should measure seventeen or eighteen feet. And if two travelers are using their coach for office or workshop, carrying with them the materials for some business or profession to pay expenses, then the eighteen-foot length is not too large. Remember, two or three feet more in length make no material or noticeable difference in handling the coach behind your car. You must always drive with a certain caution, whether you are towing ten or twenty feet of coach, or no coach at all, so there is nothing to gain in mobility by cheating yourself with insufficient room.

Again, we do not favor freakish, ultra-streamline construction for coaches. This type of design actually adds little, if anything, to the economy of the power plant and in many cases the space created by streamlines does not give usable room consistent with the extra length entailed. Low sloping ends with no headroom offer little opportunity for storage and living and give just as much total length to handle on the road as would fuller height throughout.

No coach can be better than its chassis. A strong, rigid underframe is absolutely necessary to prevent the annoyance of body noises, damage and quick deprecia-

tion. Channel-steel frame members are used in some types, wood sills in others. Either plan is good as long as sufficient material is employed. Wood sills should not be lighter than two by five inches and channel-iron members should be at least three inches in cross section. These figures are for the smaller models of trailers. Sills of proportionately greater strength are necessary for longer coaches.

Floors should be wood, not thinner than three-quarter inch, well screwed and glued to the sills and cross members. Five-ply wood is one of the best materials for floors. Every joint should be capably glued to exclude dust, wind and water. This is important. The tiniest crack in a floor will admit an astonishing amount of dampness and dust that is always a source of trouble.

Coaches are subjected to continual rack and stress. Most modern roads, it is true, are hard-surfaced but not all of them are smooth. Unless a coach is well trussed and braced, it will develop squeaks and rattles, corners and eaves may loosen up to admit dust and water, and doors and windows will refuse to open and shut accurately so as to be tight. Poor chassis design is probably the greatest cause of abnormal wear and depreciation.

Axles must be strong enough to support not only the weight of the coach, but the weight of the equipment, supplies, clothing and baggage, packed in closets, wardrobe and cupboards. Touring outfits seldom diminish in size. Generally they will grow as the camper's road and outdoor experience increases. Buy a coach

with this thought in mind. Next year you may want to pack along more hunting or fishing equipment, your family will need a greater variety of wardrobe, new hobbies will be acquired, perhaps, your wife may want her portable sewing machine, you may insist on a larger radio. All these things mean more weight, and the wise buyer will provide a margin of capacity in advance.

Tires should be of ample size and heavy-duty type. It is a good idea to use the same tire size as the car carries. This is possible, and only one spare need then be provided for both. If kept properly inflated, coach tires of suitable size will roll on for thousands of miles without trouble. Thirty thousand is by no means a remarkable or unusual mileage.

The balance of a coach is rather important. If too much weight bears down on the rear of your car, you may have to reinforce its rear springs. If too little weight comes forward, then the coach is stern-heavy and, when you drive, will bob up and down with a very disconcerting effect. Usually from 200 to 275 pounds is enough weight to be supported by the coupling which connects car and coach.

Perhaps this is as good a place as any for saying something about home-built trailers. Any careful conscientious workman can build a fairly good trailer if he has at hand proper plans, materials and tools, but we are frank to confess that we have never met anyone who was satisfied with his first attempt. It must be borne in mind that the manufacturers have had years of

experience in designing coaches. Their product has steadily improved. Recent years have seen enormous strides in the betterment of construction and design. You probably would be satisfied with your second or third home-built coach, but we doubt whether the first would please. Ours didn't. There are many, many lessons to learn before the amateur can produce anything comparable to the product of large factories with ample resources after they have concentrated on this one problem for years.

The home trailer-builder is tempted to use junk automobile parts for his chassis. This is a common and fatal error. Automobile axles are not suitable in any way for coaches. Their tread is too narrow, their clearance too high. This combination of defects will give the trailer a top-heavy balance. It sways and weaves on the road, often dangerously.

If you build your own, buy regular trailer axles. They are sold by a number of firms specializing in these parts. Order special springs, telling the supply house the approximate weight of your finished, loaded coach, and he will supply springs of the correct number of leaves. Do these things, and you have eliminated about nine of the ten chances of going wrong in your work. Procure a factory-built coupling. Don't tempt Providence with a homemade coupling or one that is suspiciously light and weak. Then if you must exercise your natural ingenuity, give it full play with the interior design of your coach. Let it run rampant in the matters of closets, cupboards, sink, stove, refrigerator, water tank, ward-

robes, radio and lighting. But you might consider these few words of advice, tentatively, if in no other way. The interior arrangements of factory trailers result from the cumulative experience of the builders plus that of thousands of tourists and campers who

It is important for a trailer coach to be well supplied with warning and clearance lights to catch the attention of drivers on the road.

have taken the coaches out on the road and lived in them. This should mean something, if nothing more than that you study factory interiors before attempting to evolve something entirely original and different.

Getting back to the salient and desirable features of trailer coaches, be they homemade or factory-built, a number on the road are obviously not supplied with

sufficient warning and clearance lights. A coach should carry two good combination tail and stop lights on its stern. Bulbs should be brilliant enough in the "stop" compartment to warn the driver behind instantly and clearly of your intention to slow down or stop. Then mount two truck clearance lights in the upper rear corners of the back. These can be electric or of the "flasher" type, made of colored glass, which warns without electric bulbs. Clearance lights at the rear tell the man behind that he is attempting to run close to or to pass a towed device, and this knowledge increases his caution.

Have two more clearance lights mounted on the front of the trailer, one in the lower and the other in the upper left-hand corner. These indicate to oncoming traffic the approximate height and width of the vehicle they are about to meet on the road. Then put two reflectors on each side of the coach in the lower corners to warn side-road traffic that you are not entirely in the clear, even if your headlights have passed the intersection.

Your trailer coach should have a sturdy bumper mounted on the rear at the proper height to engage the bumpers of passenger cars. This will prevent bangs and bumps which might be rather awkward to repair.

The question of separate brakes on the trailer is prominent in the minds of buyers. Let us say at once that we believe the time is close at hand when every trailer will carry its own separate brakes. Many current production jobs have them and the number will increase

each year. The situation is something like this. A careful driver will be all right with just his car brakes if he does not drive faster than the road clearance ahead, in ratio to his braking ability, permits; if he acts quickly and applies the brakes in ample time to stop safely and surely (this means anticipating emergencies to a certain extent); and if he does not tour into the mountainous regions of the land where long severe grades might tax the power of car brakes past the safety point. Under these circumstances one can tour without brakes on the trailer. But if he is slower to the reaction of braking needs in emergencies, if his car is several years old and does not carry the big powerful brakes of current models and if he will be crossing mountain ranges, then we certainly advise separate brakes on the trailer. The assurance of safety that they give far outweighs the extra cost.

Tourists often ask how much power is needed to tow a coach. It is less than you probably think, particularly on level roads. Once rolling, a coach gives very little drag. Any modern car engine will handle its weight efficiently and economically. Regarding the latter phase, the extra gasoline consumed by pulling a coach varies from one to three gallons per hundred miles. The average is probably nearer one than three.

There are a few points to bear in mind when towing coaches. First, never let your outfit slow up with the engine laboring on an upgrade. Shift to a lower gear before you lose momentum. If you wait too long,

you may find it difficult to start the weight of your load out on a stiff climb. The best thing to do is always to shift to a lower gear a bit before it actually becomes necessary. Then you will never have trouble. The same applies to braking. Use the braking power of your engine and apply the regular brakes slightly sooner than you would if you were driving the car alone.

Practically all factory trailers are of double-wall construction. This is necessary in order to keep them cool under a hot sun. Plyboard is used for some, fiberboard in others. Studding is usually about two by two inches. Roofs should be double and in the better coaches are made with extra padding of felt or insulating fabric between the wood and the outside top covering. The roof should be painted with aluminum paint for additional insulation against heat. Outside finishes vary, but a covering of waterproof fabric similar to auto-top material, well glued and waxed, is very satisfactory and pleasing in appearance. The home trailer-builder should remember to cover walls as well as roof with several layers of body-builder's felt, to make a smooth, neat fit of the covering material.

We have never yet seen a trailer with too many windows. Ignore any model that appears to be poorly lighted and ventilated. The fourteen-foot trailer should carry at least eight sashes, all of which must be mounted to swing open. The question of how a sash should be hinged must be considered. Our preference is for the top-hinged sash that swings out and upward. This prevents the rain from beating inside the coach. Win-

dows which disappear in the body like automobile glass are very neat but you will often have to close them all when a shifting, driving rain persists in beating through on some hot night, and you will swelter in the heat and bad air.

Every window should be screened, preferably with copper mesh, as this is the only material that wears satisfactorily in warm salt-air climates. Windows should clamp shut against a seal of soft rubber to exclude dust and rain. The door should open out, with a separate inside screen door which folds to half its regular width and swings around up against an inside wall, out of the way and without taking up much valuable floor and wall space.

Roof ventilators are absolutely necessary. We like at least two of them, one mounted over the cooking compartment, the other over the combination living-bedroom. Without roof ventilators a coach will likely "sweat" in warm climates, until the interior is abominably damp, with the chance of having bedding and clothes gather mildew.

Ingenious planning has supplied a surprising amount of storage and living room in the modern trailer. You will find all the conveniences of home, or, at least, the most important of them in its floor space of 80 to 120 square feet. It is not so important whether your kitchenette is located at one end or in the center of the coach, as long as everything as a whole is cleverly planned. A central location of stove and sink is necessary for the larger coaches with berths for four. In the

smaller trailers where two will sleep, a kitchenette built across one end is very compact and convenient.

A couple who desire and need extra space for the gratification of a hobby or a profession can select the big coach and have the regular forward beds omitted. The space left there can be fitted up with a desk or as a

(*Courtesy, Pinches Pleasure Trailer Corporation., N.Y.C.*))

This trailer compartment, fitted with a convenient desk and ample lighting, offers the accommodation of a pleasant study and is a comfortable setting for the letter writer.

workshop or a living room with chairs and special furniture. We ourselves are looking forward to our next tour in a coach whose front space will be ingeniously (we hope) fitted as a study with a desk and a multitude of drawers to hold materials and source data.

Shelves without doors are of little use in coaches. Every storage compartment needs a door to close it in tight while you are traveling. Every drawer should have a locking notch to prevent it from jarring open.

The sportsman can build, or have built to his order, special racks or receptacles for his guns and tackle along the inside top wall where the roof curves to meet the sides, utilizing space here that otherwise would be unused. A trunk on the rear of the trailer is another way of adding to its capacity. Some models carry them regularly, while practically all models can be fitted with trunks to order. Special trunks with wire doors, carrying hunting dogs to the field, are available.

Interior fittings, too, are well standardized. Refrigerators should carry fifty pounds of ice, a quantity that will last for from three to five days under normal conditions. Water tanks should be capacious, and they generally are. For the sake of better balance, we prefer the low-mounted tank to that located up near the top. A pump-faucet or air-pressure tank will give a steady flow from the tank carried close to the floor.

Small heating stoves made of heavy castings are designed especially to heat the trailer. We would not buy a coach without a heater. It will be very welcome in high altitudes and on the cold mornings and evenings encountered even when following the sun south each year. There are, you know, some really chilly days in southern Florida and California. A stove will help to keep the bedding dry during protracted rainy weather.

In their stoves some tourists burn briquets, charcoal, coke, hard coal or wooden blocks sawed to size. Others make at home a costless fuel that is clean to handle and to carry by soaking old newspapers until they are

(*Courtesy Edwards Home-mobile.*)

Food will keep fresh in the trailer refrigerator, and washing dishes is easier when the sink has a cover that includes a rack to hold them for scalding.

pulpy, and then squeezing the pulp into hard balls two inches thick before drying it. Being wood, this dried pulp burns readily, and enough for current use can be stored in a cupboard or a drawer built under the low platform that supports the stove.

Here is a hint about preparing meals. It will save both time and fuel. If a pressure cooker is used on the stove, it can be loaded with meat and two kinds of vegetables and will cook a meal for four in less than an hour. It makes tough cuts of meat as tender as expensive steak. Moreover, the cook has only one pot to watch—and to wash.

You will probably want a small oven to set on top of the cookstove. The device may appear to take up considerable room in the limited cupboard space, but there is a way to get around that. Get an oven with a shelf and pack it full of canned goods. As a result, no room is wasted and, since you will not be using the oven every day, the trouble of emptying it is not great.

Large coaches are fitted with small enclosed bathrooms containing chemical toilets, wash basins and, in some cases, shower-bath faucets and curtains. The value of this feature cannot be overestimated when there are children or aged people in the party or when sickness comes. The bath is practical and very desirable. Chemical toilets are well adapted to trailer use. We suggest that the chemical be one of those special compounds with a more pleasant odor than the usual "stock dip" which characterizes many of the formulas.

Keep the interior of the trailer well waxed. This makes dusting simple and quick. We prefer linoleum on the floor to a full-sized rug. Sand and dirt are invariably tracked in, no matter how careful you may be; but they can be cleaned from linoleum with ease. A small throw rug or two over the linoleum will protect

bare feet from a cold floor and give the interior a more homelike look. The linoleum should be glued down, as an added protection against dust.

Any trailer will require a certain amount of attention. The undercarriage and the bottom of the floor are

(*Ewing Galloway.*)

Here is a modern trailer camp beside a lake in Pennsylvania. There is an air of ease and homelike intimacy.

exposed to much moisture and should be painted once a year. The top may need a coat of aluminum paint at the same time. Fabric coverings on sides and ends should be waxed regularly when you wax your car. Have the chassis greased when your car gets similar attention.

Because of the rapid advance in popularity and use of camp trailers within the past few years, there has been a corresponding increase in their manufacture. There are many makers of the modern, newly designed trailer in New York State, in Michigan and in other states of the Middle West and the Far West.

It has been estimated that today as many as 500,000 families are living in trailers the year round in various parts of the United States. During the winter season hundreds of others are to be found on the camp sites of Florida and the Pacific Coast.

This extraordinary increase in the use of camp-car trailers has been brought about largely by economic conditions. Many families find themselves with incomes so reduced that they will be forced to live in the most economical way possible. The trailer offers a solution of the problem. I know of several families who have been forced to sell their homes or to give up the rental of apartments and who have used the funds they had left to buy trailers. Thus, their families have been housed in warm southern states or on the west coast during the months when winter weather prevails above the snow line. The amount ordinarily paid for rent and fuel for a house or an apartment through the winter in the snowy states will pay for a trailer costing about $500 and will keep the family in food, clothing and shelter for at least four months.

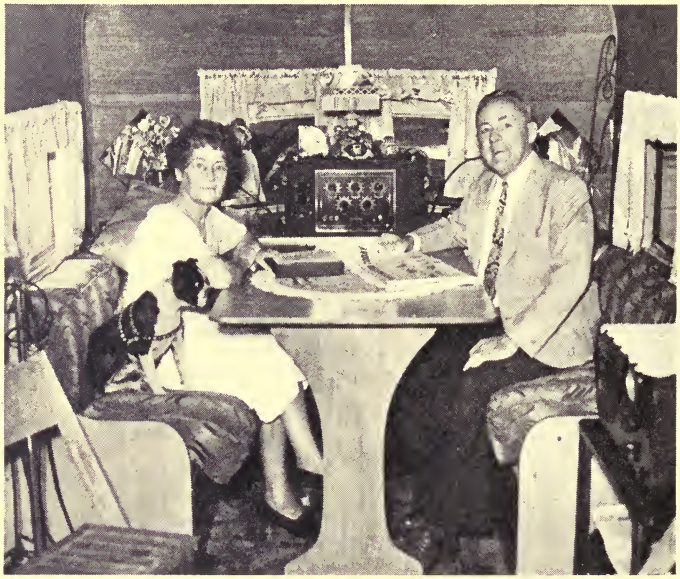
On many good camp sites which cater to camp cars and trailers connection can quickly be made with the electricity and city water supplies available. The rate

is lower than that paid at home. The tourist will carry, of course, a fairly long piece of insulated wire with terminals to connect his trailer wiring with the camp lights, when the camp furnishes current. Some carry, also, a length of rubber hose with fittings to connect the camp hydrant with the filler pipe of the trailer camp, so as to have water under pressure continuously.

Food and clothing costs are about the same anywhere that one may live, be it in a trailer or in a house. When one decides to move and take the trailer home farther so as to see the country, the cost of four cents per mile will cover gasoline for the car and for cooking, as well as food. Making a day's trip of 200 miles cost about eight dollars for a family of four, and that is not an excessive price when one considers that the family is being housed, is seeing the country, and has proper food. A couple living in the trailer on a good camp site can live well for fifty dollars per month, which will include all costs and even allow for the expense of modest entertainment, such as the movies once a week.

The small five-tube radio can be hooked up to the electric current and the trailer can be lighted with this same current, which is usually 110-volt, a.c. The cost of lighting the trailer plus the slight cost of the radio will not run up to more than half as much as in an ordinary home. Trailers on the road can be connected to the six-volt car battery for electric lighting. When one is on a camp site supplying the 110-volt current, a change to 110-volt electric bulbs is necessary. Most

modern trailers are wired for six-volt bulbs so that the car battery can be used as a supply for lights, as well as radio. Many of the modern trailers have an aerial wired along some interior part.



(*Wide World.*)

This fully equipped trailer home, of three compartments, has indirect lighting and is furnished with a radio sending set as well as a receiving set.

In some states, a trailer over 1,000 pounds in weight is required to have a set of brakes which can be connected to the car system of brakes. This is provided for in most of the new 1937 trailers so that the trailer brakes can be easily connected with the car brakes. Many states require that a special license plate shall be

carried on the back of the trailer. The cost for a year varies from four dollars up, according to the weight and the length of the trailer.

Insurance against fire and theft runs about the same for the trailer as for the car, although in some states the cost is somewhat higher for the trailer than for the car. Again we remind trailer travelers to have their regular automobile insurance adjusted for the use of trailers. See to this some time previous to your leaving home for a tour.

We have met many who combine travel and business. These people pursue a number of different occupations to make money—for expenses. Some repair radios; one man rebuilds fountain pens, calling at the stores and offices in the towns he visits for business; another chap, who, when we saw him, parked his trailer at a busy intersection, was cutting out scenic metal house-number plates at fancy prices. We have found women who crochet rugs and bedspreads for sale. One kept her electric sewing machine humming in a large trailer camp, making and altering dresses. A couple who looked as though they were both fresh from college carried several hundred copies of the latest fiction and nonfiction publications and rented them to fellow tourists by the day.

The man who appeared to be making the most money while he traveled was the amateur photographer who made protraits of other tourists. He was skillful at posing people inside their own trailers, at the dining table or beside a reading lamp in the tiny living room. He carried two portable lamp stands for photo-flood bulbs

and a small but high-grade camera. One end of his trailer was partitioned off with sliding plyboard doors into a laboratory where he finished and mounted his prints. He made outside pictures, too, and business was so good that he worked steadily for five days in one trailer camp of south Florida.

Chapter XI

THE MOTOR CAMPER'S CAR

A sudden clatter in the engine of the car ahead sent a thrill of dismay through our hearts. There was no chance of our being mistaken. We knew that sickening sound. A bearing had gone out and it would be hard to imagine a more discouraging place for engine trouble. We were a day and a half away from civilization, in the middle of the Boston Mountains, one of the wildest, most rugged ranges east of the Rockies.

There were no regular roads through the Bostons then—just rough wagon trails that led down stream beds and up rock-strewn mountain sides and rutted washes, the sort of going that taxes every ounce of endurance in both car and driver. Twenty-five miles was a good day's drive and we had to fight for every yard of it.

There were no telephones and no garages to call, even if it were possible to telephone. The chances of finding a replacement bearing at any of the distant mountain repair shops, whose mechanics shod horses and mules more often than they repaired cars, were equally remote.

What would you do in a case like this? Well, we'll tell you what our traveling companion, Jake Becker, did. He pulled off the engine pan to discover just how bad the trouble was. A connecting-rod bearing had got tired and quit. This would be easier to repair than a main bearing, so Jake walked half a mile through the pines to a little blacksmith shop and bought a chunk of babbitt for a dime.

Then, while one of us melted the babbitt in the tin top of a baking-powder can over a pine-knot fire, Jake dug a handful of red clay from the road bank and molded it about the crankshaft. When the metal was ready, he poured it into the clay mold and cast a new bearing right on the shaft. In exactly sixty minutes we were on our way again, and a year later Jake wrote that the bearing was still tight and quiet.

Fortunately, the modern motor camper seldom finds it necessary to attempt roadside repairs of this nature. Repair shops and parts are more widely distributed and there are skilled mechanics in even the smallest towns. A motorist can get service and good service all over the country. Car trouble is the thing least apt to hold one back from enjoying a motor camping trip now. But in the early days we sometimes had to use rather crude methods of repairing our cars and getting them out to civilization.

Jake Becker was a skilled mechanic driving home from the Texas oil fields, and we had joined up with him in southern Arkansas near Texarkana. In a spirit of adventure we decided to cross over the Boston Mountains

north into Fort Smith. The time was early spring, frequent rain and high water were rampant. Every creek and mountain stream had to be forded if it was not wide and deep enough to justify a ferry. There were no bridges; in fact, we found very few roads, and our trip turned out to be more adventurous than we had expected.

But throwing a bearing was only one of three accidents that happened to Jake's car. A jinx surely perched on his running board that trip. His auto hung rather low to the ground, and the first day we entered the mountains he ran smash into a rock that stuck up above the roadbed and broke out the bottom of the aluminum crankcase. The oil poured out over the ground and things looked rather serious.

But, as we have said, Jake was a mechanic, skilled and patient. He pulled off the broken pan and neatly patched the hole. He used a piece of sheet metal ripped from the inside of a car door and an old inner tube for a gasket. His tool case held drills and brace, and he drilled small holes through the patch and case and drew them together with stove bolts. We always carried a gallon of motor oil with us then, as reliable sources of oil were scarce, so we filled the crankcase of Jake's car and started on our way again.

We went on until Jake hit a bigger rock in the road. This time he broke out the patch and snapped the bottom of the oil pump off besides. This was serious. We knew we could patch the hole again, but a shattered oil pump was another matter. Cars could not run without oil

circulation. The pump was aluminum, impossible to weld in those days.

But Jake got another piece of sheet metal and while the rest of the bunch made camp and cooked up a hot meal, he sat patiently cutting and bending until he walked over to the campfire with a triumphant grin. He had made an exact duplicate of the old pump and had fitted in the gears. It worked!

So we kindled up a big fire of rich pine, patched the crankcase hole again and made ready to move in the morning. Jake got out his banjo and the mountain air swelled with harmony. We sang "Sweet Adeline" and "The Girl with the Striped Stockings On." The last-named ditty was considered rather risqué and naughty in those days, but try it on the blasé youth of today. You won't get even a yawn, let alone a rise. Roads are not the only things that have changed in the past twelve years!

Touring in backwoods country meant something. When we started over those Bostons we naturally inquired about the trails. We were not so green as to call them roads, you understand. An old-timer in Mena centered a copious stream of tobacco juice into a knothole in the board sidewalk with uncanny accuracy.

"Thar's two trails over the mountains," he said dryly. "And whichever you-uns take, you'll wish to God you'd taken the other one!"

He was right, only we wished we had taken neither of them before we got through. But we did get through and we wouldn't for worlds have missed our experiences,

both trying and pleasant. There were many bright intervals to help efface the memories of our trails. We camped one week by a swollen mountain stream and lived on the fat of the land. Wild turkeys scratched the hillsides bare, behind our camp; there were deer farther up the narrow valleys and the river swarmed with fish.

One trying afternoon when we had jerked a car three times from deep mudholes and were hot and tired, a mountaineer drove up and set a pail of "choc" beer on the tire of his wagon wheel and invited us to partake. White corn meal floated like foam on top of this heavily loaded liquor and we blew it back to make room for our lips. This mountaineer not only brought us stimulant, but he carried encouragement as well. A mile farther on the rough trail ended. A gravel road would lead us in to Waldron.

Your automobile is the largest, most expensive and most important piece of motor camping equipment you use and it fully deserves its share of attention and care before you start. Not all tourists realize the significance of this. You find some of them fussing over a patent contraption to cook whatnots and dewdabs over an open fire, while their car stands in the garage unnoticed and sadly in need of an overhauling. We wonder how they ever came to be like that.

If your trip is to be a long one, there are certain things you should check up, because enjoyment during the vacation will depend to a large extent upon how little trouble the car gives. So before you strap on the tent and kiss the cat good-bye (don't laugh, we've seen folks do

it), have a good mechanic check the car over. Remember, any repairs will cost less at home than they will out on the highway—not only less money but less of your time as well. If your vacation totals only two weeks, it will be rather expensive to waste two days of that period

(*R. I. Nesmith.*)

Time and money will be saved in the end if before starting on a tour you have a good mechanic make sure that every part of the car is in perfect working order.

watching a strange mechanic do the job that should have been done at home before you started.

If it seems necessary, have the valves ground, the tappets adjusted and the carbon removed. Change the oil in the crankcase and be sure that the axle and gear cases are filled with lubricant of the proper grade.

If the radiator shows even slight signs of leaking, have it soldered. Don't pour in a can of radiator solution to stop the leak. This clogs the water circulation and when you reach a stiff mountain pull or cross the desert with the thermometer showing 130 in the shade, you'll have overheating trouble. We know. We crossed the desert west of El Paso, Texas, with a leaking radiator and only one small water bag. We bought water from station agents, begged it of ranchers and finally got through—but those two days put some gray hair in the place where it shows most.

An overheating motor is an irritating factor in a pleasure trip. It is a very good idea to let a radiator man flush and clean the cooling system before you try touring in mountain or desert country. Do beforehand everything you can to avoid this trouble. If the fan belt looks worn, replace it. Otherwise the blamed thing will break on a mountain grade and cause delay if not actual damage to the engine.

Look over all four springs. Sometimes a leaf will crack or break and go unnoticed until you strike a bad bump and a sharp jolt lets the car frame down on the axle. Then you'll have to block it up with a ball of rope or a folded blanket until you find a garage.

The brakes of your car should be in first-class shape. If you have burned out the parking brake, as too many of us do by running with it on, have new lining installed. If something should go wrong with the service set, this brake may prevent a bad accident. These are days of speed, sharp acceleration and equally snappy deceleration,

and you must be able to stop as quickly as the fellow ahead does. We always have the brakes carefully adjusted before we start touring. If they are badly worn, we have them relined. Remember that cheap brake lining is the worst sort of economy. One five-mile mountain grade may burn it out, or water and mud may render it temporarily useless.

In such a spot as this switchback on a mountain highway it is well to have the steering gear in perfect order and the whole car tuned to its best performance.

Have the steering gear looked over closely. If any part shows wear, have it adjusted or replaced. Cars with broken steering apparatus sometimes show an astonishing inclination to climb trees or jump over culverts. Once we had one fall apart, and we'll never forget the helpless sensation when the car headed for a ditch and we twirled the wheel around without the least effect.

Have the carburetor and ignition tuned up for maximum performance. You'll need all the steam you can get when you hit some of the continental divides or that hill at Uniontown. Our test for a well-tuned car is its ability to idle slowly down the street in high gear. If it will do that, we don't worry about the speed end.

If you drain some of the accumulated sediment from the bottom of the gasoline tank, you can avoid trouble with clogged fuel lines. We use the small siphon that is sold for filling camp stoves. Run the car on a slant so that the gasoline settles in one corner under the filling cap. Put the siphon hose in the bottom of this corner and draw off a couple of quarts. This should remove all the water, rust and dirt. Then drain and clean the carburetor screens and jets and, unless you are unlucky and have storage-tank settlings run into your car, you can drive for weeks with an even, steady flow of fuel.

Test both front and rear wheels for loose bearings. Rear wheels will sometimes be loose on the axle shaft and need the nut that holds them set up tight. Jack up each wheel and shake it vigorously top and bottom, or run the car down the street while someone watches for wobble or weave. If there is any, get rid of it. It may give you quite a thrill when a wheel comes off as you drive along, but it is bad for weak hearts.

A new set of spark plugs is good insurance against a missing, sputtering motor. With present high-compression engines, the manufacturer's suggestion that we change plugs each ten thousand miles sounds like good advice. We once sat on the edge of eastern Colorado,

right in the middle of a busy prairie-dog village, and tinkered for an hour with a set of battered plugs. That was the only village, too, for thirty miles either way and we knew we had to get at least three of those plugs working or else settle down with the prairie dogs, owls and rattlesnakes and be local boosters.

Good rubber plays an important role in making your motor camping trip pleasant. We never start off for several thousand miles with half-worn-out tires. We find that it always pays to trade them in and begin our vacation with new rubber. Then we ramble on for weeks, or even months, without trouble or delay. When new tires are installed we have the front wheels checked for alignment. Otherwise their treads may go to the devil in a hurry from abnormal wear.

Wrestling with worn-out rubber along some dusty road is exceedingly trying to the camper's temper. A vacation is usually limited and every hour spent in changing tires and patching tubes means just that much less fun and pleasure. Soon enough the time will come to return home and dig in at the old job, without hurrying the event through tire troubles.

We know half-worn casings to pick up many nails, tacks and bits of wire that would leave no impression on better rubber. On one trip through the Southwest we got to the point where we would willingly detour five miles around a Mexican village, if it were possible. We believed that the inhabitants gave their kids nice, long, pointed tacks to play with and that the careless little fellows dropped them plentifully along the road. Our

worn tires picked up as many as three of these souvenirs in a day's drive. We knew that no Mexicans spread carpet over the adobe floors of their huts, so house-cleaning time was not responsible for our grief. Finally in desperation we bought four new tires and that ended our trouble with punctures.

You need a good jack in your tool kit. You may never use it (our hope is that you won't), but be sure that it is in working order and that it will slip under both front and rear axles when a tire is down. If it won't, you may have to lay your spare flat in the road and run the wheel up on top of it to make jack room. This is a common stunt but, before we heard of it, we sometimes cut saplings with the camp ax to build up a flat-tired wheel in order to get the jack in place.

We have seldom carried more than one spare tire, even on cross-continent tours. As long as all the rubber is good, one spare usually sees the whole trip through. But we have a small pocket vulcanizing set (that sells for a dollar) to use when some emergency catches us with two flats before there is time to have one repaired. A few years ago motor campers were always advised to have new rubber on the wheels, two complete spares and about four extra tubes under the seat somewhere. This amount of rubber might have been necessary at one time in the history of motor camping, but it certainly would be foolish now. Tires depreciate as much on the spare rim as on the wheel and we prefer to invest our money in new tires where they do the most good, instead of buying extras and all those tubes.

Be sure you have a crank for your car. Otherwise if the starter sticks or balks, you'll be caught in a rather embarrassing position. As an example, take the situation just before a traffic signal with a line of impatient drivers behind and a sarcastic cop beside you, giving advice on what to do and where to go.

We like plenty of lights on our car. One spotlight is set through the windshield post at the driver's left, a type that can be turned and twisted in all directions. This is most useful for picking up road signs at night, for searching out possible camp sites and for flashing back in the face of some mean fellow who has spotted us with his own first. Then there should be a trouble lamp, with fifteen feet of extension cord, that can be carried around the car and used to change tires or make minor repairs in the dark. Such a lamp can also be used to light the tent.

Every motor camper will appreciate the convenience of a tandem, or double, windshield wiper. The driver's front-seat companion will then have a clear glass to look through in helping him watch for side traffic and road signs.

For hot-weather touring the small awning curtains that shade door windows are extremely comfortable. They allow fresh air to circulate through the car and keep the hot sunshine out.

After standing helplessly watching a camper's auto melt down into a blackened mass of metal in southern Texas, we decided always to carry a small fire extinguisher for preventing a similar accident. This device is carried on the toe board in the driver's compartment,

where it can be reached instantly without moving anybody or anything. Don't put it under the hood. Otherwise a flare-back from the carburetor or a motor fire will make the cover too hot to lift and drive you back from your only aid in fighting the blaze. You may

(De Cou from Ewing Galloway.)

In an all but dry river bed in New Mexico this big car was trapped and held fast until it had been dug out. That meant a considerable delay in a region far from populous.

have use for an extinguisher only once in twenty years or you may never need it, but just the same there should be one in every car. The extinguisher is similar to a tow-rope, in that when you do need it there is no substitute available.

It is not necessary to carry an additional supply of fuel or oil unless you tour through unsettled districts,

away from regular highways. You find filling stations in profusion along every route that has a moderate amount of travel. We always have an extra quart of oil in the crankcase, carrying it overfull purposely. However, if your way leads into wilder country, it would be better to procure some means of carrying a half-gallon of oil and a gallon of gasoline. There are running-board kits holding three metal cans for fuel, oil and water, which are universally used in the West. If you wish to provide against a shortage of gas alone, you can buy thin, flat one-gallon cans that will lie under the seat.

Have a good pair of chains where you can get at them easily. East of the Mississippi you may never use them, but remember out west there are still thousands of miles of gumbo, alkali and prairie dirt that are marked with national highway signs. A sudden shower turns some of these trails into slippery messes that call for chains—and good ones. If you have forgotten yours or neglected to use them at the proper time, you may have to camp awhile in the ditch where your car slid.

Motorists need not carry many spare parts even for long tours. Service stations for every make of car and automobile accessory are well distributed anywhere that roads lead. However, it does no harm to carry some of the smaller items that experience has shown the car to need. A generator brush, a set of ignition points, a spare fan belt and two extra spark plugs take up little room and may save some delay in an emergency. A few years ago, we thought we needed an extra spring, an axle shaft and a rod bearing in the spare-part kit, but such

large parts can usually be obtained quickly. We never carry a spare spring, for even a country blacksmith can make new leaves to replace the broken ones, and axles and wheel bearings do not break as they did ten years back. Cars are made to deliver more care-free miles than ever before and they are ably doing it.

Motor camping seems to be hard on the finish of a car. The reasons are the action of dew, dust, alkali and gumbo and the fact that the car is sitting outdoors both day and night. The thing to do is to protect the luster of the car's body as much as possible.

The hood seems to grow dull first, possibly because it receives so much heat from the engine. We know several campers who carry in each car a light tarpaulin that is stretched over the hood every evening. This has materially helped to preserve the original finish. Then there are a number of protective polish treatments that will prevent the caustic action of mud. Go over your car with one of these before you start. See that the baggage is not rubbing against the finish at any spot and do not let alkali or gumbo stay on the body any longer than you can help. Many of the larger camps provide wash racks for their patrons and you should at least spray the sides well and wash off the accumulated material, ever if you do not follow up this treatment with a chamois skin.

A car's top becomes dull and gray quickly when it goes motor camping, so give it two good coats of top dressing both before you start and when you return. You will be surprised how bright it will stay and how long this attention will prevent leaks.

Chapter XII

PACKING YOUR CAR FOR THE ROAD

YOU have selected and assembled your complete motor camping outfit, but as it lies on the floor before you it has acquired rather a formidable appearance. What a pile of stuff! Where are you going to carry it all?

You can hardly leave anything at home, for you chose each article with the express purpose of insuring your comfort and pleasure on the highway. The thing, then, is to pack carefully and efficiently. Two persons traveling in a large car can pile their equipment in the tonneau and go merrily on their way, but more thought and not a little skill are required to load the camping outfit for four or five tourists in a small or medium-sized automobile.

Overloaded, poorly packed cars were common enough ten years ago. It was not unusual to find one of the smaller makes stalled halfway up some steep grade, unable to proceed farther because of the load saddled on it. The old idea seemed to be: take everything you own, pile it in the car and then let the family scramble for what room is left!

In a previous chapter we have shown how any family or party can camp comfortably with a minimum of equipment, but even an outfit of small bulk and weight may puzzle the inexperienced tourists when they start to load it. Here are some of the reasons why efficient packing is so vital for a happy, convenient and enjoyable trip.

In the first place, there must be plenty of room in your car for each of the party. It is no fun riding on a hot day wedged between suitcases and blanket bags, with a bag of groceries on your lap and a water jug behind your knees. Just as much of the outfit as possible should be carried outside the car. There are always enough small articles that are used more or less regularly through the day—such as raincoats, maps, gloves and handbags—which must be carried inside.

But outside packing brings up an important point. The cars now used for motor camping and touring are generally of the sedan type. A few open models are occasionally seen on the highways, but closed types predominate for pleasure driving, just as they do for business use. The soft velours or broadcloth and the polished lacquer of these cars make our packing job more difficult. Some of our equipment is bulky, with sharp edges that may scratch or wear this fine outside and inside finish, unless carefully handled.

Modern cars travel at high speed and our heaviest equipment must be distributed so that the original balance is not disturbed. Otherwise we may slide off into a ditch or upset on some sharp curve, not to mention

skidding on wet pavement. Altogether the packing job is a nice little problem and presents as many difficulties to the novice as would throwing the diamond hitch on a piebald cayuse.

The original method of packing, when motor camping first came into being, was to assemble the outfit in duffel bags made of waterproof canvas and tie them along the sides and across the rear of the car. Some even lashed a bag on the front bumper or wedged bags or suitcases, one on either side of the hood, between it and the front fenders. A few motor campers still carry their stuff in this way, but it has at least two serious disadvantages.

Dust will collect between the bags and the car paint and grind it away like so much sandpaper as you drive. The bare metal is sometimes exposed in a week's touring through the alkali regions of the West. And nobody can claim that this sort of packing improves or enhances the looks of car and outfit.

A few motor campers are still to be seen riding in cars that are cluttered and overloaded, bristling with bags and boxes, the lantern and the bird cage. It was this kind of packing that started such expressions as "highway hobos," and "tin-canners,"—names which the modern motor camper has fortunately outgrown and deserves no longer. Such promiscuous packing is not necessary and indicates faulty or careless methods.

It is perfectly possible to load a fine car with a complete outfit without damaging its finish and so that it doesn't look like a Christmas tree in full bloom. At the start, discard all fancy and unusual methods and schemes

for carrying equipment. Keep your stuff from the car's roof and don't tie a big bundle on the front bumper unless it is absolutely necessary (it seldom is). Baggage out in front is always a source of potential danger. The lashing ropes wear through and a plump blanket bag suddenly

(*Ewing Galloway.*)

In packing it is important to keep in mind the good of the car, the convenience of the tourists and the protection of luggage from dust and wet. Some modern cars provide for neatly stowing away a large load.

cast under your front wheels will turn you over. A load on the roof makes the car unbalanced and unwieldy to handle and has a tendency to start leaks in the deck.

What you want is a convenient, safe way to carry things, so that they are protected from rain and dust, easy to get at when wanted, with no chances of losing

them. When you jump out to make camp some evening, it is rather awkward to find no tent stakes or to have part of the cookstove missing.

The logical place to carry the bulk of your outfit is on the running boards. We always load them first. Tent and poles, folding cots, duffel bags holding blankets and mattresses can be packed on the running boards to splendid advantage. Also such items as thermo jugs, folding stools or chairs, the stove and the cooking kit may be laid behind luggage racks or packed in steel boxes clamped on either board.

The running boards are well braced and they hang low to the road. Divide your load in two parts, pack one on each side, and your outfit is well balanced and tidy in looks. You can speed smoothly along with gratifying stability over the highway and need not worry for fear that some piece of duffel may fall off.

But before you purchase any such items as luggage racks, duffel bags, carry-all boxes, web-strap clamps or tarpaulins to be used in packing the camp equipment, plan the method of packing and, in particular, decide whether the outfit is going to be placed on the running boards so that all four doors of the car may be opened or whether you must pile one side so high that the two doors there will be locked and not used for entering or leaving the automobile.

If you have a small party and a carefully selected outfit, the former plan is possible. You can pack low piles of stuff on each board, making them solid and firm enough to be stepped on when you use the doors, and all four

(*Ewing Galloway.*)

Long, strong waterproof bags closed tight with drawstrings are of great use to camping tourists for packing duffel to be carried on their cars.

doors will swing clear over this baggage. A party of two or three can practically carry their complete outfit in this way.

But larger families with a proportionate amount of equipment may find it necessary to pack their duffel well up on one side and use the opposite doors only. This is not such an inconvenience as it sounds and is a condition one can quickly become accustomed to.

There are three general ways to hold this duffel on the running boards. The most common method is to use the luggage carrier or rack, this being a light steel fence that clamps along the outside edge of the board with quickly detachable clamps. Behind this rack are laid the various packages.

Some campers use waterproof bags for everything. These bags are usually twelve, fifteen or eighteen inches in diameter and thirty-six inches long. They close with drawstrings and are rain- and dusttight. Others wrap their pieces of equipment in a waterproof tarpaulin and make one long narrow bundle to lay behind the luggage rack. By using two stiff pieces of cardboard or wallboard for sides, it is possible to wrap up a very neat package, secure it with web straps so that it can be easily handled and tie it to the rack, away from the side of the car, with heavy cord. This prevents any wear on the paint.

Luggage racks are usually of a folding construction. One type folds lengthwise, extending or shortening to fit different lengths of running boards. You can extend such a rack but halfway and carry a high load ahead of or behind one of the car doors, allowing it to be opened

and used. Or you can shorten the rack to leave room for a fender trunk or running-board kitchenette at one end.

The other type of rack adjusts or folds to different heights. This kind is very practical to use for one rack if your plan of packing calls for two. You can raise or lower it to fit your load. When it is extended to full height, a lot of baggage can be laid back of one, or when it is adjusted halfway up, the car door opens over the top and there is still room for considerable equipment.

A neater method and one that is gaining in popularity each season is to use light steel running-board boxes instead of racks. These metal containers are made in many sizes and you can buy a length, width and height to fit your running board exactly, or two-thirds of its length, if you wish. They are named "carry-all" boxes and are quite roomy and watertight. To make them dustproof you should glue an inch-wide strip of felt, such as is sold for window weather stripping, around the edge of the lid where it fits down on the top edge of the box. This will seal the joint so as to exclude dust.

These boxes clamp to the running board with a simple thumb-nut clamp and can be removed or installed in two minutes. No cutting or drilling is necessary to fit either boxes or racks.

The boxes protect baggage perfectly and eliminate the cluttered, messy appearance of a miscellaneous pile of duffel. Everything is neat and trim, no one knows you are carrying a camping outfit, if you do not care to advertise it.

You have your choice of a low box over which the car doors swing open, or you can choose one as high as twenty-four inches and which holds nearly a complete camp outfit. Then there are intermediate heights of twelve, sixteen and eighteen inches, to fit all load requirements. A box over which your door opens can be

(De Cou from Ewing Galloway.)

With steel running-board boxes (in this case, low enough to allow the doors to swing over them) and a roomy trunk on the rack behind, the car can be packed without the appearance of sprouting bundles. It is preferable to keep luggage from the roof ordinarily.

from seven to nine inches high, depending upon the construction of your car. The lids of all boxes are well reinforced so that you can safely step on them.

A box over which the car doors swing will probably hold a tent, stakes and poles and some smaller items, or a pair of folding cots. If you use one of the largest sizes, remember that they are roomy and will be heavy when

packed. So, balance this weight by placing some other weighty equipment or your heaviest passengers on the opposite side.

A third way to hold duffel on the running board is to use metal clamps fitted with long web straps. These clamps are very handy for strapping down a tent, or the straps can be lengthened out to hold a pair of suitcases or other bulky equipment on the board. Many tourists use a pair of these clamps on one side for the tent and a rack or a carry-all box on the other side for cots, mattresses, etc. Such a combination is the one most commonly used.

After you have decided on loads for each running board, start in with the next-best packing place—the rear of your car. You can simply strap a folding cot or a bag of blankets over the spare tire, or, if you have a trunk and rack, you can load what is left of the stuff easily and with room to spare.

A trunk is one of the most useful camping accessories. We would not want to start out on a long trip without one. The trunk and its rack can be used in several different ways. Some campers rebuild a trunk into a kitchenette to hold food and stove. The front hinges down and is supported level with two folding legs, making a work table for the cook to use when preparing the meals. Anyone who does not care to attempt the rebuilding job can buy a ready-made kitchenette to fit a trunk rack.

Other campers pack equipment in the trunk, and still others have it fitted with suitcases and a hatbox and carry their clothing in it. Large families or parties with

heavy outfits can gain the most by leaving the trunk at home and by packing their equipment directly on the rack. It is more roomy and will hold about three times as much outfit.

But take a trunk or a rack no matter to what use you put it. With a trunk you can save a lot of room inside the car. If your car is not equipped with side-mounted tires, you can buy practical racks for trunks that fit on the rear and have provision for carrying the spare tire at their back. Extension trunks and racks to fit any make of car are available and they are most convenient for campers. While side-mounted tires provide more space for trunk and rack, you need not go to the expense of having them to get this room. Practically every car manufacturer will mount the regular demountable rim on one of the front fenders for around twelve to fifteen dollars. This allows you the use of a regular rear trunk platform without the expense of six wire wheels.

If you strap a miscellaneous load of equipment on the trunk rack, have a tarpaulin to protect it. The best covers are those made to order from auto-top material, sewed square or boxlike to slip down smoothly over the load without any folding or wrapping. Any auto-top repairman can make such a cover for you and it will wear for years. It gives a neat workmanlike appearance to your pack load besides keeping dust and rain from your duffel. Some sort of protection should be provided for a rear load, since water and dust suck in heavily as you drive.

Your running boards and trunk rack have now taken care of practically the entire outfit. A typical packing

program for a party of four traveling in a five-passenger car and using air mattresses instead of cots would be like this. Strap the tent and poles on one running board under a pair of web-strap clamps. Use a folding rack or a running-board box on the other side for air beds and blankets. Pack the stove and the cooking kit in the rear or in a special food-supply cupboard or kitchenette.

Much work and bother in preparing camp meals can be saved with a special container for the stove, utensils and food supplies. Then when you camp, you open up only one container and everything for use in preparing and serving the meal is at hand.

Food is always more or less messy and difficult to pack and carry. There are breakable and perishable packages and packages that won't stand rough handling. For a long trip it will pay the camper to make or buy a kitchenette or a food cupboard. There are several factory-built models that provide a satisfactory solution for the problem of packing kitchen equipment. One of them may be clamped on the running board ahead of the strapped tent, ahead of a folding extension luggage rack or a short carry-all box or on the rear trunk rack. We have seen kitchenettes carried in the back of the car when only children occupied the tonneau.

You can build such a food case if you are handy with tools. Use light plyboard and cover the case with auto-top material. Or you can buy a fender trunk from an auto accessory dealer and rebuild it, fitting shelves and compartments to hold stove, aluminum kit and food supply.

Whichever you do, have the trunk or the homemade case cut away at one side to fit snugly against and on top of the curve of the front fender. This carries the thing well forward and there is usually enough room for the front door to swing open. Fender trunks are usually so constructed and, when fitted with shelves

The iceless refrigerator is set on the running board and close to the front fender, leaving room for one of the shorter folding luggage racks.

and a compartment for stove and nested cooking kit, they compare very favorably with the regular factory kitchenettes.

If there is an icebox or a water refrigerator in your outfit, you will have to make room for it on one running board. Use shorter luggage racks or boxes and place the

refrigerator up against the front fender opposite the kitchenette.

It is not necessary to have storage room for a large supply of food. The modern motor camper will seldom be far from stores or some source of supply. There are hot-dog and ice-cream stands even on desert highways where ten years previously all there was to be seen was an occasional jackrabbit or coyote. You should, however, have with you some food to cover an emergency, at least enough to form three meals. A breakdown might hold you up a day and a night, far from restaurants or stores. We remember one week when our party, trapped between two rivers in central Arkansas, was marooned by high water. The water came up suddenly in the night from a heavy cloudburst back in the hills and we could cross neither way for seven days. Toward the last we had to hustle regularly with our fishing poles to keep the skillet full.

Special items may need special thought and treatment before they are packed in a satisfactory manner. Others will fit in without a bit of trouble. Most of the sets of folding tables and chairs are thin enough to lay on the floor of the tonneau, where passengers may rest their feet on top of the outfit comfortably.

The ingenious camper will devise special ways of packing, when the necessity arises, but he should be sure that these special ways are safe and practical. If the outfit threatens to overcrowd the car, remember that one or two blankets can be spread smoothly over

the front- and rear-seat cushions, where they take up practically no room and do not affect the riding ease.

Some tourists remove the rear-seat cushion entirely and substitute a roll of mattresses or blankets, to conserve space. If the roll is properly folded and placed, it will be nearly as comfortable as the regular seat. We ran across one fellow who tied a number of small, seldom-used articles in between the springs of his seat cushion. Another had built a thin, round trunk or box to hang inside his spare tire and rim. He carried his tire chains here. They were easy to get at and, if muddy when packed, could not soil the rest of the car.

Chapter XIII

CAMP COOKERY

JUST because you are motor camping there is no reason why you must eat food inferior to that enjoyed at home, no reason why you will have to resort to any unusual methods of preparing it—such, for instance, as that our friend Sandy used when he cooked for dudes on a Montana ranch.

We can vouch for this, as we saw and heard it all. Sandy was squatted beside his campfire heating the big frying pan very hot to broil a juicy, red, inch-thick steak. Up strolled a female tourist in tweed knickers, bristling with curiosity. She professed much interest in Sandy's undomestic science. She should have known better.

"How can you tell when the skillet is hot enough?" she asked.

"I spit in her, Ma'am," quoth Sandy. "If she goes ker-pop and sizzles right smart, she's plenty hot. Watch me." But when he turned to see if his proposed experiment in elementary physics was being followed, his audience had vanished, and everybody remarked on the

lack of appetite displayed by one of the ladies that night when we gathered about Sandy's spread of steak, brown gravy, potatoes and peach cobbler.

There has been a considerable change in the methods of preparing food in camp during the past ten years. The old order has given way to a new sphere of relish and variety. It was not so very long ago that the word "camping" was instinctively associated with a diet of beans, bacon and flapjacks.

We recall the time when we asked a friend to journey with us by motor through the Wisconsin lake region. We came pretty close to losing a good friend then. He had just left the military service and he turned down our invitation vigorously.

"Don't you know I've been camping for two years already, eating beans and monkey meat? I'm going to rest up now and take on some real grub. You run along and sleep on the ground if you want to. Eat burned biscuits and soggy beans. Enjoy yourselves if you can. Me for a feather tick, pie, cake and ice cream!"

Such an argument may have gone over ten years ago, but nobody can put it across now. Motor campers are not restricted to the typical camp dishes. They are fully equipped to prepare in camp the dishes preferred and eaten at home.

The modern motor camping cook carries the same cookbook used at home, and it is consulted as often in camp as between vacations. Perishable foods are preserved in iceboxes or refrigerator baskets. Meals are cooked on very efficient stoves with capable ovens, and

the camper has access to practically all the food markets available to the fellow who stays at home. No wonder we smile down on the poor innocents who imagine we eat and live like barbarians when we take to the road!

(*Ewing Galloway.*)

Cooking with frying pan and teakettle over a small bricked-up fire hole limits the menu, but the portable camp stove has made a great difference in the camper's fare.

But despite all this handy equipment and all these facilities, the job of cooking on a camping tour is a real one and everybody should do his best to lighten the load of the one selected to be cook. In the first place, camp early enough in the day so that the cook has

plenty of time to get the meal ready and then cleared away before nightfall. Unless you are equipped with a very strong tent light, much time is lost puttering about in the dim light, trying to do kitchen work.

When you make camp, set up the stove and light it before you begin to unroll the tent. Fill the canvas water pail and open up the cooking kit or the kitchenette so that everything is accessible for the cook. In the morning curb your impatience to get an early start and give her time to get everything packed properly.

Have plenty of variety in your camp meals but do not insist upon too much variety in any one meal. Instead, spread it over the entire day. Too many different dishes cooked at once mean more work for the cook, and some of them will get cold before all are ready.

Carry some paper plates and use them occasionally to give the cook a respite from dishwashing. As long as we tour in settled districts, we buy food in small quantities. There is nothing gained by burdening the cook and the car with a future supply. Leftovers and any surplus are in some cases hard to manage, pack and carry. They must be moved about each time the cook goes to the food box. We buy just what our party will clean up at the end of the camping day, which usually means in the morning when we pack up to move on. In warm weather a half or a quarter of a pound of butter is enough to manage at one time. When we buy buns, we count up the number each person is likely to eat and buy that many. With this system very little is left over.

In hot weather we generally eat only two meals per day—that is, regular meals cooked on our stove. We lunch at noon on sandwiches and, perhaps, a salad. With an eye toward lightening her labor, the cook sets out the raw materials—bread, butter, lettuce and fruit—and invites us to roll our own. There are no dishes

With a nested aluminum cooking kit, a refrigerator basket and a thermos jar, the touring camper has no fear of limited fare.

to wash when we have finished. The cook has an opportunity to enjoy herself equally with the others.

During the many years we have followed the motor camping trails, we have continually tried to broaden the variety and appeal of our camp meals. Consequently, we have worked out a number of recipes that are easily and quickly prepared, tasty, wholesome and satisfying. We are not going to mention or describe the common

camp dishes. Any book on camping or any cookbook you pick up has every old stand-by catalogued. Instead, we shall try to offer new and fresh suggestions that we hope will add to your pleasure and comfort when you follow this most alluring of outdoor sports.

Campers usually eat too much protein—eggs, bacon and beans. Many of the more easily prepared camp dishes are rich in this content and require balancing with vegetables and fruit. We are partial to salads for striking this balance and giving a healthful zest to our appetites. We always carry a jar of a tasty boiled salad dressing which keeps for a long time and is made like this:

1 egg
¼ cup water
¼ cup vinegar
1 tablespoon sugar
¼ teaspoon dry mustard
2 teaspoons flour
1 tablespoon butter
¼ teaspoon salt

We use this in making both salads and sandwiches. For salads we use potatoes, macaroni, lettuce, cabbage, navy or lima beans, carrots and various combinations of fresh and dried fruits. In fact, we are never stumped for salad material. We always dig up something that passes. You do not need a recipe to prepare camp salads. Just use whatever you can get. Remember, a little cream cheese spread over any salad lifts it from the ordinary.

For sandwiches we combine this salad dressing with peanut butter, raisins and dates, lettuce, sweet onions,

cream cheese, crisp bacon, cold beef, boiled eggs, fresh tomatoes and even the humble bean. The youngsters are very fond of Graham bread covered with whole raisins or dates and salad dressing. If our appetites need coaxing, we mix cream cheese and minced onion together for a spread. The big sweet onions, sliced very thin, with a dash of sugar and salt, hit the spot, provided we all partake equally and drive fast afterward.

Other favorite sandwiches are crisp bacon with lettuce or sliced tomatoes, sardines and mayonnaise spread on Graham bread, and the succulent hot dog tucked between the split halves of a long bun with plenty of mustard.

We often carry in the food box a jar of sandwich spread we make by grinding up four pounds of seeded raisins and two pounds of dates. To this we add a pound of creamery butter and two pounds of fresh peanut butter. Then mix in salad dressing and salt to taste. This mixture has never yet failed to bring down the house. It would make a cedar chip palatable, but, of course, we prefer it on fresh bread or buns.

We eat quantities of canned soup on the motor trail. Soup fills your stomach to the degree of tension the motor camper demands before he feels comfortably full, and does this without producing the heavy feeling that would follow an equal gorging on meat and potatoes. Soup is healthful and easy to serve. At night, after a long, cold drive, a bowl of hot soup takes the kinks out of your frame and disposition in a jiffy. A can of tomato soup makes excellent sauce for roast meats.

Two cans of mixed vegetable soup will turn plain boiled beef into delicious stew. The cream soups, such as asparagus, celery and pea, are a welcome change if you tire of meat flavors.

When we travel through good beef country, we eat plenty of steak. Then our favorite evening meal is steak, potatoes and gravy. If any of the spuds escape the evening massacre, we fry them for breakfast or make them into salad for lunch. But in order to foil the deadly frying pan and cheat it of its prey, we do not cook our steak in lard as many outdoor cooks do.

It may be an innocent-appearing utensil, but we believe the skillet has maimed as many outdoor enthusiasts as those fool hunters who think everything they see moving in the woods is a deer. Frying is so easy and natural, many can think of no other method for preparing meat in camp, although everybody knows fried foods are the least healthful on the list.

Here is our way. Don't cut, pound or hack the steak. Get the heavy skillet very hot, grease the bottom just enough to prevent the meat's sticking and slap it in. Shake it about at intervals, if it shows a disposition to stick. Watch carefully, and as soon as you see the red juices coming up through the top of the steak, turn it over.

If it is a thick cut, you may have to turn it back again in order to cook through to the center. But when both sides are well browned, stick your fork into it. If it is tender, take it up, salt it and lay a chunk of butter on top to melt. Meat so cooked is nothing like the sole-

leather product of those cooks who persist in frying it in lard. Instead, your steak will be as tender and impressionable as the heart of a young divorcee just back from Reno.

Try this way of pan-broiling if you procure any small game along your route. Rabbit saddles, squirrels or grouse breasts are simply delicious cooked like this. There are a few points to remember when you prepare small game for the camp table. The first one is to clean the animal or the bird just as soon as possible after it is killed. At least draw and remove the entrails at once. Game that lies or hangs undrawn for six or eight hours is decidedly not at its best for food and should not be served. This delay in cleaning small game has undoubtedly spoiled many appetites for it and caused a prejudice against small animals and birds that are really delicious when properly handled and cooked.

A second point to watch is that of removing the wild, gamy flavor that is found in some species. To do this right, lay the dressed meat in a pan, put a teaspoonful of soda on top and pour in enough boiling water to cover. Let it stand five minutes, pour off the water and the game is ready to cook. Some cooks will parboil game until not only the wild taste but all other taste and flavor are removed and the result is a flabby, flat and dry mess that, in the end, you feed to the dog.

Motor campers have opportunities to vary their camp diet with small game and fish. Fish in particular are plentiful along many of the trails, and we have caught trout right inside several western camps. But

we tire quickly of fish if we eat them steadily. In fact, we believe there is no flesh that palls our appetites any more than a surfeit of fish.

On our first trip west, we decided we would not be hampered by prejudice and in our spirit of independence we prepared a pair of young prairie dogs for the table. Now if one is well along in the advanced stages of starvation we advise him to follow our example, but only in the case of an urgent emergency—if his life insurance had lapsed, for example. We have very friendly feelings toward the little fellows and think they are terribly cute sitting up beside their dens. We wave a casual hand to them as we pass, but we drive on. We never stop now. We have no desire to enter into closer relations with them. Once was enough.

Here is another way to cook steak. Have the butcher cut a thick slice in two-inch squares. Lay a slice of onion on each and wrap it in a strip of bacon. Broil over coals on toasting forks, in a wire toaster or in the camp-stove oven. Eat between slices of bread. By the time this meal is ready the whole company will be on hand; the delicious odor brings them running.

For a quick evening meal we cut up a bunch of green onions, tops and all, and mix with two pounds of hamburger steak. When this is browned and then steamed in a covered pan, like Swiss steak, it also broadcasts a tantalizing odor that brings every stray dog to your tent. And your less fortunate neighbors may have trouble not to break at least two of the Ten

Commandments but, despite all this, the dish is worth while.

For a quick morning meal, something to cling affectionately to your ribs and stave off that "gone," empty feeling until noon, heat a tablespoonful of shortening in the skillet and pour in a cup and a half of milk. When the milk is hot, break in six or eight eggs and, before they cook stiff, stir in broken crackers. This always brings the laggards out of bed in a hurry, but the frying pan will be the dickens to clean unless you fill it with water and let it boil on the stove while you eat.

This one is called egg matto but, despite the name, it is delicious. Fry sliced onions until brown and tender. Use plenty of them, as they shrink in cooking and there's no alibi on earth for the cook who shortchanges a bunch of hungry motor campers. Add a small can of tomatoes and three eggs. Stir well while the eggs cook and when they are done add sugar, salt and pepper, to your taste. This is delicious served on toast or just as is.

When we are camping for some time in a place, we like to prepare a meat loaf of two pounds of round steak and one of pork, both ground fine. Add two eggs, a cup of dry cracker crumbs, a cup of sweet milk, salt and pepper—sage, too, if you like the flavor. Bake in a moderate oven and lay a circle of potatoes around the meat to bake with it. We usually put potatoes in the oven with other baking foods. Rub a little butter over their skins.

Another combination meat-and-potato baked dish that saves time for the cook is scalloped potatoes. Lay pork chops, slices of ham or bacon on top of the potatoes and you have a complete meal.

Another good week-end dish, when you have plenty of time, is macaroni cooked chop-suey style. Take a cup and a half each of onions and celery, cut in cubes. Boil and drain them. Fry a pound of lean steak until tender. Boil a package of macaroni in salted water and drain. Mix all together with a pint can of tomatoes, season and bake slowly. Camp-jaded appetites always get a kick from this one!

Here is a recipe we have seen in only a few cookbooks. It is called spoon bread and originated with an old Virginia family. It is a sure-fire way to make warm friends of your dinner guests. To make it you need

1 egg
1 cup sour milk or buttermilk
½ teaspoon each soda and salt
⅓ cup corn meal
1 tablespoon melted shortening

Bake in a hot oven. This is worth driving five miles to get the buttermilk it requires. When we are very hungry and intend to make this dish the main part of our meal, we increase the recipe as many times as there are mouths to fill. Four times the above quantities will just go around with four hungry campers. It takes the place of both bread and meat and furnishes a splendid outlet for any surplus maple sirup there may be on hand!

Stews fit in nicely with motor camping cuisines. Since several different foods are cooked together and served together, both tasks are simplified and lightened. Our favorite stew is made with a base of two pounds of beef and one pound of mutton. Then we add in the order required to cook tender, onions, carrots, potatoes, a few soaked lima beans, a couple of apples and a sweet pepper. Have your coat off and your sleeves rolled up, as nobody is going to stand and wait on ceremony when the lid comes off this glorious mixture!

When you start your kettle of stew, don't forget the mutton. It will probably be goat flesh, but you won't know the difference at mealtime. If your wife is a bit squeamish, don't tell her.

It was some time before the lady who cooks in our tent discovered how much of their delicious flavor our stews owed to these noble, if highly scented, animals. But we gave the thing away one morning on the trail between Socorro and Albuquerque, when we passed a herd of several thousand goats. We had dined on stew the evening before and we still had fond memories of its pleasing fragrance.

A pair of old billies grudgingly made room for the car.

"Clever creatures, aren't they?" opined the lady.

"Sure," we agreed, still in our reverie. "And they make such wonderful stew."

That night the big pot held beef—genuine, range-steer meat—only.

Here is a variety of stew that won't start any anti-goat discussions. Get a pound of round steak. Fry it with a

large onion and a quarter of a pound of suet until brown. Then turn in a can of beans—red kidney, lima or baked navy—a can of tomatoes and some pepper and salt. Cook until the meat and onions are well done.

Because the outdoor life and fresh air of camping stimulate one's appetite for sweets—rich foods to replace

(Courtesy Pinches Pleasure Trailer Corporation, N.Y.C.)

Meals prepared in the trailer may be eaten out of doors, near enough to the source of supply to be steaming hot or ice cold.

the extra amount of carbon the body consumes on the motor trail—your meal will lack something unless you wind it up with a dessert at least once daily. Many a time you have doubtless stood up from a camp meal, full to the last belt notch, but still craving something more. That craving was for good, old-fashioned dessert. So to balance our meals and round them out, we bake

pie and cake and make puddings in our camp-stove oven. And just as soon as we started to do this, our menus satisfied.

Sometimes we carry the brands of prepared cake and pie flour which need only the addition of water before they are mixed and baked. Usually, however, we carry separate ingredients and make pastry after our own recipes. But if you wish to reduce your pie and cake making to the least possible work, these prepared flours are very practical. When we stir up a cake from them, we can add cocoa to make a dark layer or raisins to give a fruity taste. Given a fair chance, these cakes and pies will turn out well. We have never baked one yet that the gang refused to eat!

For those who will want to mix their own, here is what we call our sure-fire cake recipe. For some reason or other, it never fails. It always turns out tasty, palatable and satisfying.

1½ cups granulated sugar
½ cup shortening
2 eggs
1½ cups buttermilk or sour milk
2 teaspoons soda and 1 teaspoon vinegar
2 to 2½ cups flour (depends on brand)
1 teaspoon baking powder
3 tablespoons cocoa
2 teaspoons vanilla
¼ teaspoon salt.

We frost this cake with a simple mixture of one pound confectioner's sugar, three tablespoons of butter

and a little sweet milk—canned milk will do. In Minnesota we once refused an offer of a dollar, cash, for such a cake. A fellow camper watched us slide it out of the oven and, as we plastered on the frosting, he made his bid. But we had better uses for the cake just then than we had for money.

In making pie and puddings we use both fresh and dried fruits as fillings. We never shall forget one memorable trip down the Columbia River Highway when the cherry season was on and the big black-red Bings were on sale everywhere. We made pies of them—big, deep pies with at least two inches of fruit between their tender flaky crusts. It was our first acquaintance with the cherries picked ripe from their trees and we indulged in a perfect orgy of baking. The only time we ever worked the oven any harder was in Searcy County in the Ozarks when the big, luscious Arkansas strawberries were ripe.

Here is a camp dessert that is much easier to prepare than pie or cake, and it satisfies sweet-craving appetites just as thoroughly. If you use an open fire, as many do for toasting, you require a wire toaster. Otherwise use a large pan set in the camp-stove oven.

Prepare first a foundation of sliced Graham bread. This is the bottom of your toasted sandwich dessert. Cover the bread with a layer of marshmallows, then a layer of sweet or milk chocolate. Top it with a cover of more bread, and toast the combination. When the marshmallows and the chocolate are melted, the party is on. Boy, is it good? Wow! It hits the spot, especially

on cold days when the wind nips at your ears and nose.

We are partial to cocoa as a camp beverage. It braces one up, stimulates and soothes road-weary muscles and nerves without any ill aftereffects. We use canned milk,

(Philip D. Gendreau.)

From the milk bottles on the table it is plain that the milkman has made a morning call here.

powdered milk or fresh milk, depending upon where we tour and which is easier to secure and carry.

In the larger campgrounds there are regular deliveries of milk each morning. In smaller camps on the edge of villages we have often been offered fresh milk by neighboring farmers. One came in and woke us up at four A.M. in an Iowa camp. We had driven late and camped late the day before. He rattled an empty bottle on the wooden

table beside our camp and loudly cried his wares. After we could persuade ourselves that the town wasn't on fire, we decided such enterprise deserved our patronage, so we slipped into trousers and shoes and went out in the wet grass and bought.

We always leave home with an empty milk bottle to trade in when we purchase milk on the road. We carry butter and mayonnaise in glass jars with screw tops and have a piece of corrugated paper to fold around each jar when it is packed. When we buy eggs, we have them packed for us in the cardboard shipping cartons. Any grocer will do this for a few cents extra.

Camp outfitters supply small waterproof bags that hold three or five pounds of cereal or flour and are handy for auto camping food supplies. They also can furnish several sizes of tin cans with pry-up tops. Have some of these for shortening, sirup, etc. Don't carry any food in the original pasteboard or paper container for any distance. The cartons get limp and weak from moisture and the contents will mold and spoil. Have a few sheets of parchment paper for wrapping bacon and meat or anything that is greasy. Adhesive tape or surgeon's plaster is very convenient for sealing cans of milk and for holding the lids of cans or packages in place. Use it when you doubt whether some food container is going to stay put while you drive. Spilled foodstuffs in the kitchenette make a miserable mess for the cook to straighten out.

Chapter XIV

WELL-GROOMED MOTOR CAMPERS

AS we have already said, there is no sound reason for the motor camper's looking like a tramp. This truth was pointedly brought home to us one morning in northeastern Oklahoma when we were held up a few miles from the Kansas line by a truck mired in the mud.

Behind the truck, headed toward us, were three cars of gypsies, attired in gaudy and dirty costumes. These people were the original motor campers, as you probably know. Many years ago they saw the possibilities of the automobile and the truck as camping transportation and many of the bands that roamed over the country discarded their horse-and-wagon equipments in a hurry.

While everybody waited for the truck to pull through, several of the gypsy women walked past it and stopped beside our car. They started to talk to us, but their conversation was strangely different from the usual begging plaints of "We tell fortune. You got match?"—this last question intended to pave the way for soliciting more valuable gifts.

Said they, "You tell fortunes too? You go Kansas? Kansas no good. Don't go there. Kansas bad!" Evidently business had been rotten in the Sunflower State.

After our first shock of surprise, we tumbled. Believe it or not, they took us for fellow craftsmen, kindred workers of the public!

At this friendly and fraternal advance, one half of our party nearly fainted. It was the feminine part, of course. She might have passed out entirely if she hadn't distrusted those birds of prey who hovered uncomfortably close to our car. One stood on either side and she nearly went cross-eyed watching them both. An expensive camera and other articles lay exposed in our open car and, despite their friendly tip on the state ahead, she kept a sharp eye on that loose equipment.

Then when the road was cleared and we started on she ordered firmly, "Stop at the first camp! We're going to get cleaned up in a hurry. When we look so tough that one band of gypsies can't tell us from another, it's time to do something!"

She was right, too. The truth was, we were a bit frayed about the edges. We had just come over the Boston Mountains in western Arkansas and our journey had been a long-continued fight to get the car through without serious damage. We had moved rocks, cut detours through the woods and filled in ruts gouged out by the high-wheeled mountain wagons.

Our encounter with these gypsies started us thinking. We not only thought, but we put some effort behind working out better ways to keep ourselves neat and

clean while we toured and camped. We made considerable progress immediately, for it is neither impossible nor difficult. Just a few convenient arrangements kept in mind and a few minutes spent night and morning will do it.

(*Ewing Galloway.*)

Even in a tent the woman tourist camper usually manages to look trim and attractive.

The man who takes care of the car and does the heavy work of making camp needs a cover-all suit, to be carried in a handy place, not under the seat or where a lot of duffel must be moved to get at it. Otherwise he will be tempted to let the suit remain there when a tire goes flat or the car needs greasing.

This is the suit for him to wear when working on the car, when pitching the tent in dust or mud or when

tinkering with the camp stove. He should have a pair of cheap canvas gloves to protect his hands while at dirty jobs and throw them away when they are badly soiled. These two helps will aid the man-of-all-work in saving his clothes and person from depreciation.

We carry a small can of liquid dry cleaner to remove spots from our garments. Occasionally in camp one gets spotted with grease from the car, soot from the stove or plain mud. If the cleaner is used immediately, the stains come out easily and completely. For washing up after a greasy job, we have at hand a can of mechanics' paste soap. This soap can be used without water, if necessary, and it leaves the hands soft and white.

Washing in camp is more or less of a task, since the water is frequently hard and sometimes cold. A small package of water softener is a big help in cleaning up when there are such handicaps. Soft water will clean, even if it is cold, but hard cold water is almost no better than none at all. All these supplies can be bought in small quantities and are not difficult to pack.

The biggest step we took toward helping our party stay clean and neat in camp came when we rigged up a case to hold all our toilet accessories and supplies. Any case will do, if it has a waterproof lining. Loops can be sewed or riveted along the sides to hold most of the articles. The rest can be packed in loose. The point is, when we lift this case out of the car we have at hand everything we need in order to clean our clothes, brush up, wash and shave. There is no hunting frantically through the outfit for the soap or a toothbrush or a

towel. Everything is conveniently accessible, even a heavy canvas bag that contains shoe paste and polishing cloth. There is no excuse for not using the case and its contents regularly and frequently. If we catch a

(Courtesy Pinches Pleasure Trailer Corporation, N.Y.C.)
The trailer tourist has no excuse for failing to keep well groomed.

youngster with uncombed hair, he has no alibi that he couldn't find the comb!

Clothing is bound to get soiled in camp life. Expecting this, we start out with garments that will least show travel wear and stain. We provide a serviceable clothes-brush and see that it gets a good workout every night before we turn in. We sweep the tent each morning and

we clean out the inside of the car just as often as it shows signs of dust. These attentions will go far toward keeping clothes clean.

We always carry a laundry bag when we motor camp. This article is even more helpful on the trail than it is at home. When we turn into a camp where there is good laundry equipment, the wash is already assembled. There is no need to hunt through all of the duffel bags and suitcases and to tear the outfit to pieces searching for a stray pair of socks or a shirt that we know needs attention.

Each of the larger camps is usually provided with a laundry house where there are washing machines, usually electric, and equipment and places to iron—a great improvement over the arrangements of the early days when the camp custodian would set out a tin tub and a washboard for us. But it is not necessary to use camp laundries unless we wish. The wash can be left at a regular laundry while we camp and rest up for a few days, or we can have the finished clothes mailed ahead to some town on our route and pick them up there.

Confidentially, though, we have not had much luck with leaving clothes to be sent on ahead. We have not trusted laundries since the time we left a bundle at Columbia City to be forwarded to Oakland. When it arrived, the wife found a tiny wad of pink silk trimmed with dainty lace mixed up with our riding breeches. She claimed it had been in a pocket, but we know this is preelection slander of the worst kind. We didn't

have a chance to examine the find, although we had plenty of opportunities to explain why it came there. We might add that the matter isn't entirely cleared up yet.

Some campers carry with them a small electric iron for pressing clothing. This is hardly necessary, since the bigger camps furnish irons to their patrons, usually at a small additional cost, although on busy week-ends one may have to wait his turn to use them.

It is sensible to use plenty of paper towels in camp. We always wipe our dusty or muddy feet with them before stepping inside the tent. Just as soon as our camp is made, a roll of paper towels is hung up by the door and everybody uses them freely. They save much time and labor in the business of looking well groomed in camp and on the highway.

Chapter XV

CAMPING WITH SMALL CHILDREN

PARENTS who are keen motor camping fans are sometimes confronted with the question of how young a child can be taken on trips. The answer, of course, can be given best by the parents themselves; or, if they are in doubt, their physician should be consulted. We are going to suggest, however, that we have known many successful vacation tours that were enjoyed in company with children only a year old.

These children were, of course, healthy and normal. The place for the sickly, ailing child is at home, where it can receive the best of attention. But when campers are outfitted with modern equipment, such as closed cars, a weather- and insect-tight tent, a capable stove and refrigerator, the normal child can be given excellent care and protected against exposure with surprising ease.

Children who motor camp will have the benefits of fresh air and sunshine perhaps to a greater extent than they could obtain them at home, and both of these

agents are too well known as promoters of health to need any discussion here.

Children enjoy camping more than they do touring. Long rides are tiring to them and they cannot enjoy driving in the same way as adults. The thing to do, then, is to make shorter daily rides and camp longer at comfortable camps where small children can run and play and exercise. If the child is too small to appreciate unusual scenery, it should be encouraged to sleep as much as possible while the party is traveling.

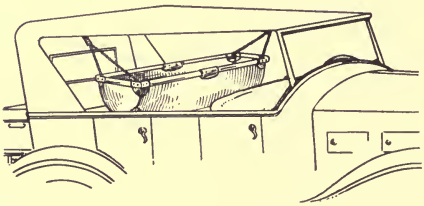
There will be the question of safe, inspected foods, such as milk, when the youngsters are taken along. We should hesitate to start on a long trip through poorly settled districts with a small child, because there probably would be difficulty in locating a reliable milk supply each day. But in camping through the thickly populated states there is no trouble in finding tested and guaranteed milk in any town large enough to support a first-class camp.

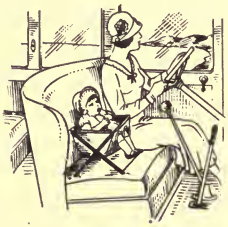
If prepared food is used for infants it will be found at larger drugstores or enough can be carried to last the trip through. If the child is using a diet of strained vegetables, these can be bought in small cans, a practical and convenient source of supply.

There are several types of small portable cots or hammocks which are sold by dealers in auto and camping accessories and which are designed purposely for parents who tour with small children. These cots hang in the tonneau of the car or are clamped to the back of the front seat. They carry small tots in perfect comfort

while the car is traveling. They can sleep undisturbed at any time during the day, in fact, the soothing rhythm of the motion saves dad the walking tours he sometimes must take at home.

In camp the hammock can be left in the car or taken inside the tent. The car is generally a dryer, warmer location, since it is well off the ground, but in the tent one can give the small child more prompt attention in the night.





Baby can start early on a touring career, with the swinging bed and the safe, comfortable seat made for his special needs.

Camp cots are not so well adapted to small children, since the child is apt to kick himself bare of covers and become chilled. Also little folks need more insulation under them than adults, and this is not easy to provide in a cot unless a thick mattress and plenty of blankets are used. An insect-proof cover for the child's bed must be provided, if it sleeps in the car or in a tent not perfectly proof against mosquitoes.

Some families solve the bed question for children three years old and up with small sleeping bags. The bag has an air mattress base, and is soft and warm and so constructed that the child cannot expose himself

during the night. All outfitters can furnish them and they are particularly desirable in providing the required warmth without too great a weight of covering.

Children who accompany their parents on the motor camping trails usually have a happy, healthy and

(Courtesy Pinches Pleasure Trailer Corporation, N.Y.C.)

Young appetites that lag will be quickened by life in the open; there may be added zest in a meal cooked on the camp's stone fireplace. This life will delight even the dog.

robust appearance. After they have been out a few days or a week, their color improves, their appetites pick up and, if they are given proper care, only good health will result from the long hours spent in the fresh air and sunshine.

Older children will get just as much kick out of the vacation as their parents. Don't leave them at home. At

many camps they find playgrounds well equipped with devices on which they can work off the energy stored while they rode in the car.

Travel is education of the most practical kind for children. It will give them a confident poise and bearing that should materially help to smooth out the difficulties awaiting them in mature life.

Chapter XVI

CAMP SITES: TENTS, TRAILERS AND CABINS

DOWN in Sante Fe, New Mexico, we stayed for the first time in a public campground. It was just a vacant lot of dirty sand scattered over with tin cans, but it looked good to us. We had been making dry camps back in the mountains for the past week and we welcomed a plentiful supply of water, even if we had to carry it from three blocks up the street. The only convenience (if it could be so termed) on the ground was an old shack from which motor campers were permitted to rip boards to use as fuel.

Fancy getting anybody to run into such a camp now! It was really a wagon yard, a place where ranchers, driving fifty miles or more in to town, could unhitch their teams and feed them and perhaps sleep in their sheet-covered wagons before starting home with loads of freight and supplies. This yard was close to the Mexican quarter and we slept with a gun under the pillow and rose up to look out at the natives who cut across the lot every half-hour. The Mexicans used this

lot on their way uptown, and they paused to watch the queer habits of the gringo campers.

When we made our first long tour, most of the western settlements had such wagon yards and we camped in many of them. Later, the yards were remodeled into

(C. P. Cushing from Ewing Galloway.)

Campers early in the century, when automobiles still looked like "buggies" and Buster Brown bobs were in vogue, were lucky to find a roadside camp site like this.

motor camps and given an ever-increasing list of conveniences to attract and accommodate the swelling streams of motor gypsies heading toward the setting sun. If a town in the West didn't own a wagon yard or a campground, some general store would have a vacant

lot at the side or rear of the building where anybody was free, or even welcome, to stay.

While there has always been plenty of room to camp in the West, the first motor campers touring central and eastern states were sometimes at a loss for tent sites. For a while we used schoolhouse yards. They were mighty convenient, with pumps and toilets. Some had soft-water cisterns that we enjoyed immensely when removing the dust and stains of travel.

Even a country churchyard was not passed up, with night close at hand and everybody tired and ready to eat. We camped in a Missouri churchyard one Saturday evening, in spite of some misgivings in the mind of the lady of the party as to our not waking in time to miss the early church attendance the next morning.

Farmers were sometimes kind enough to let us drive into a pasture and camp. We have slept along the sides of country roads on the grass near fences and even in the intersection of crossroads. After a few years, we found signs on practically every schoolhouse that warned off campers under penalty of heavy fine. This was deplorable, but doubtless necessary because of those careless campers who destroyed property and with criminal neglect let their campfires spread.

We were caught one night on the edge of Saint Louis where, after looking in vain for tent room, we drove up in front of a tall gate and set up the two tents beside it. There was just enough margin to keep us clear of traffic. It was nine o'clock, high time to make camp, with everybody fagged and sleepy. This looked pretty good

in the darkness. We imagined that the gate led back into a city park, so we slept soundly the sleep of the unworried.

But the next morning's sunlight changed our opinion. We were horrified to find that we were straight in front

A pleasant pasture makes an acceptable overnight camping ground when the farm owner is a willing host.

of a big stone mansion, a regular palace surrounded by tall trees and a hedge. It belonged, no doubt, to one of the beer barons of that thirsty city. Yes, we moved. Nobody wasted any time, that morning, in breaking camp. Those Arabs of tradition who were reputed to fold their tents and silently steal away should have been there to watch us. We would have shown them how it's done.

Now every motor camper can depend upon finding a good campground either municipally or privately owned in every town and city he reaches. Motor camping has spread so completely over the land that camps are located every few miles on all highways. Hundreds

(*Wide World.*)

Here are some of the homes on wheels of 2,000 Tin Can Tourists of the World when they held a summer assembly at Sandusky, Ohio; their trailers are of various sizes and designs.

are passed on a tour of any length—big camps, little camps, good, bad and simply indifferent camps. They are a necessity in these days of crowded highways and heavy traffic.

In most sections there are camps built and maintained especially for trailer travelers. The cost of space in them

varies from 25 to 50 cents per night and from $1.50 to $5.00 per week, the amount depending somewhat on the camper's location, but more on the number and quality of conveniences furnished to the patrons.

For instance, in southern Florida we find the typical camp on a main highway and within comfortable distance of the ocean beach. Its marked-off lots rent for $3.50 weekly. This sum includes electricity, water, the use of shower baths, toilets and electric washing machines and irons.

Every year on the fine camp site in Saint Petersburg, Florida, the famous Tin Can Tourists Club, which has its home there, holds a big meeting. In the winter of 1935 over 900 trailer camp cars must have gathered there, to say nothing of many hundreds of tent outfits.

Throughout Florida many smaller camp sites provide such essentials as electricity, gas and water. Some are located in rather remote sections and cater to campers who do not like the crowds assembled on the big camp sites. Among others too numerous to mention are the convenient camping sites provided at Arcadia, Clearwater and Dayton. In fact, in Florida any tourist can feel sure of finding the most desirable of camp sites, whether on the east or on the west coast or inland.

Today no one need worry about being able to secure suitable camping quarters for trailers along any of the much-traveled routes of the United States. There are in the country over 15,000 camp sites where both tents and trailers are accommodated, and, as the popularity of this travel-camping life spreads, additional provision

is made for the growing demand. The question is no longer where suitable sites can be found but simply where you wish to go. If you do not turn aside too far from the main routes, you can count upon desirable places to park in comfort and safety. If you travel with

(*Wide World.*)

One of the many camp sites along the Pacific Coast is at Coral Beach, California, where the tourists have a little city at the water's edge, with supplies of electricity and other conveniences.

a trailer, you have your own beds and bedding, your own water supply and food in your own larder, thus eliminating the possibilities of any inconveniences or discomforts in sleeping arrangements or meals.

In and around Denver, Colorado, there are numerous up-to-date camp sites with all conveniences, and farther

west, along the Pacific Coast, campers have a choice of most satisfactory camp sites up and down the entire length of California and through Washington and Oregon. The national parks of the West offer excellent camping sites where all wants are met.

In the national park in the Shenandoah Valley of Virginia—a new park of the East, located in an interesting historical region—new roads are being built and a movement is on foot to erect suitable quarters for trailers.

Farther north on the Altantic seaboard good camp sites are to be found in such scenic sections as the Berkshire Hills of western Massachusetts; along the seacoast from Boston to Portland, Maine; and on Cape Cod in Massachusetts. On the coast of Maine is Acadia National Park. Still farther north and west in New England there are admirable United States Forest Reserve camp sites at "Dolly Cop" in Pinkham Notch of the White Mountains in New Hampshire. Up in Crawford Notch in this same section is another fine camp site where the United States Forest Rangers in charge keep a well-ordered camp and offer free wood for campfires. Campers return there year after year because the location in the beautiful White Mountains is ideal. Brook-trout fishing and hiking among the mountains are popular.

One of the most interesting trips for a camper on the Atlantic seaboard is around Gaspé Peninsula in eastern Canada and along the south shore of the Saint Lawrence River. Already small but good camp sites are available

there, and in a few years this trip will offer the best of fully equipped camp sites for trailers.

Some tourists hunt for locations which can be occupied without cost. Sometimes, filling stations have spare room that they will allow you to occupy overnight in return for the usual courtesy of your having them fill up your gasoline tank before you leave. Up in the mountains and out in the West there are thousands of acres where you can pull out of the road and make camp. With the water tank filled, the refrigerator well iced and grocery shelves stocked, you can live there for a week without making a trip to town.

At first, towns boasted that they offered free camps for motorists. A free camp was something of an advertisement, several years ago, but opinions and conditions have so changed that we see fewer free camps and more of the pay variety on each tour that we take. This change has actually worked to the advantage of the camper. It costs money to provide the conveniences we like to enjoy when we camp, and no fair-minded man is going to kick at paying four bits so that his family can have those advantages.

Some towns were afraid, at first, that a camping fee would drive many visitors away, but this was not the case. Tourists appreciate what a pay camp means. Such camps are usually state inspected and regulated. They conform to certain regulations of sanitation and police protection that are devised purposely for safeguarding the health and convenience of campers. The drinking water is tested regularly by the State Board of

Health and it can be drunk safely. Toilets are clean and sanitary.

Campers of a better class patronize pay camps because they know they will get more for their money, even though the less desirable site is free. In a pay camp there are better neighbors and the car and equipment are

(*Ewing Galloway.*)

Fine shade trees and an extended view are attractions of this camp site in central New York.

safer. If there are two camps in any town, one free and the other charging a fee, we choose the pay proposition every time. If a fee for camping eliminates any visitors at all, they will be those least desirable.

When pay camps first started, we found many of them asking a fee of twenty-five cents. There are a few of these left, but they will usually be small camps near filling stations and hot-dog stands and will contain for the

tourist's convenience only a pump and possibly toilets. Later, the fifty-cent fee per car per day became standard and is still so, although a few of the larger and better camps are charging a dollar and giving good value for the money. Private camps will usually quote a reduced rate by the week or the month for long stays. Municipal camps in the more crowded tourist sections are usually forced to set a limit on each visitor's stay in order to make room for new arrivals. Otherwise they would become clogged and crowded with permanent campers who seek jobs or spend the winter with a motor camp as their home.

Let us see just what a motor camper can and should get for the fifty cents or the dollar that he hands in at the office of a well-regulated camp. The common conveniences of drinking water, toilets and brick or stone ovens for cooking are scarcely noticed. What he is really looking for is the hot-shower-bath sign. A camp must have this in order to lure him within its gate. Then he will cast his eye over the rest house, speculate on its size, whether there will be room to lounge and read if wet weather starts. In the meanwhile his wife will have hunted up the laundry equipment and given it the once-over, if she has a bag of soiled clothing that needs rejuvenation.

These things are now expected as a matter of course and a camp managed for profit will not get very far without them. But many camps go a long way farther to provide for one's comfort. Throughout Idaho, where electric power is cheap, we found electric stoves,

washing machines and irons all available for campers. Wash racks for cars, grocery stores, restaurants, police protection, mail and telegraph service—all of these are available at the better camps.

Many of the finer camps are located in attractive places. Out west they set the camp on the bank of a trout stream, if possible. Some eastern camps are set close beside the sea, where campers can swim, enjoy all surf sports and eat seafood.

At Hammonasett Beach in Connecticut, 15,000 campers can be accommodated. About 5,000 of them can be seen there any week-end in the season of summer and vacations. The charge is nominal, only $3.50 weekly or fifty cents per day. The camp is divided into small lots and each camper takes possession of two when he arrives. On one he pitches his tent; on the other the car is parked. This keeps cars in one place and grease is not dripped over ground that will be used for tents.

There are plenty of electric lights at night here. Most camps rather overdo lighting and keep the bulbs going long after everybody is in bed. A light shining into the tent keeps us awake and attracts mosquitoes to the ground. Our vote is for a dark camp after ten o'clock except for a light at the entrance and one or two scattered about to aid the attendant in his night inspections.

Everything is quiet at the camp on Hammonasett Beach. Unnecessary noise is prohibited. State officials oversee the place at all hours of night and day and the camper and his possessions are perfectly safe. Lifeguards supervise the beach, there is water piped to the corner

of each tent site, meat and groceries can be delivered, and there are stores and a restaurant on or near the camp.

Police protection is always desirable in large camps that shelter hundreds of campers, recruited from all walks of life. Still, we have never been molested in a campground during our many years of touring, although we did wake up one midnight to find a stranger examining with keen interest the spare tire on our car. But he moved politely away when we asked him what the devil he wanted!

When we visited Portland, Oregon, the city of roses, we found the tourist camp a city in itself. There were a garage for auto repairs, mail and telegraph service, everything you would expect in the way of city conveniences, for but a nominal rent.

One of the largest camps in the country is at Denver, where several hundred acres of ground accommodate thousands of cars. But the largest camps are not always the best. At Pierre, South Dakota, we ran into as pleasant a spot to stay in as one could wish. A small camp was laid out on the bank of the Missouri River, with plenty of shade and grass. That's what we like to camp on—clean soft grass. Everything was clean here. The rest house had a screened porch, stoves and a bath. Boats were available for the angler to cast his bait and many of the campers brought fish back to their tents every day.

In fact, good fishing is one of the features of several western camps. At Rapid City, South Dakota, we watched a motorist whip fourteen dainty rainbows out

of the tumbling stream that ran beside our tents. At Spearfish Canyon in the Black Hills we had a peach of a scenic camp and the trout were biting in fine fashion. Fishing Bridge Camp in the Yellowstone is famous with everyone who has entered the park as a place for fishing and camping. At Deadwood the friendly caretaker of

The shelter house in the pleasant camp at Pierre, South Dakota, offers the comforts of a porch, a kitchen, and a bath.

the camp cut our wood and delivered it at the tent door. This has nothing to do with fishing, except that those most fond of the sport usually abhor such exercise as is needed in swinging the ax, and it's just too bad the Deadwood camp isn't on a stream.

Washington, D. C., is one of the principal tourist towns of the East and the municipal camp, run by the city, is a marvel of completeness. The camp is laid off

into tent sites with streets between to provide easy traffic without confusion. There is an admirable rest house with radio, reading matter and plenty of room for a rainy day. The laundry site contains drying rooms, electric washers and irons. A barber shop and a restaurant are on the ground. The charge is the usual fifty cents

(*De Cou from Ewing Galloway.*)

The tourist who prefers to lodge in a housekeeping cabin when he stops can choose a camp such as this in the San Bernardino Mountains, California.

per day. In addition to tent sites, there are cabins for rent ranging from a single-room size up to five-room apartments. These are furnished with beds and bedding, gas cookstoves and running water. The larger ones contain gas-burning fireplaces. Cabins rent for a dollar per day and up.

Thousands come here each season and camp while they visit the innumerable points of historic interest

in and near the Capital City. One can use this camp as headquarters for taking many side trips out in every direction.

In many camps now found there are cabins to accommodate the motorists who do not carry tents or who at times get weary of camp making. The usual charge for a cabin is from one dollar up to two dollars. Most of these cabins have some variety of cookstove and all are furnished with beds, tables and chairs. Heating stoves are set up when cold weather comes. There may even be a shelter under which the car is parked during the night.

Camps are built and maintained exclusively for the use of motor campers. All over the country people have gone to a lot of trouble and some expense to provide for our comfort and convenience when we travel and we surely owe them a debt that we can easily pay if we will only do so. We can do this by using camps and their furnishings as we would use the things in our own homes.

It is regrettable, but a fact just the same, that the main reason why a dirty camp is dirty is that the campers who use it have made it so. Your camp will be largely what you make it. Of course, the larger ones are carefully supervised and, if anyone is caught in the act of destroying or depreciating property, he is put out and even fined if his offense was great. But we should not require close supervision. We should be continually on our honor to keep and maintain camps and camp fixtures at their best.

Clean up your tent site. Don't leave the sod chewed up as if you were some amateur golfer who had tried to connect there with his ball. When you pull tent stakes, take them out with as little damage to the ground as possible. Burn every bit of refuse and garbage. If you can't burn it, bury it. Don't chop and slash trees or shrubbery. This may sound like unnecessary advice, but unfortunately there are a few campers on the highways who need it and should keep each point in mind. A camp site will deteriorate in a hurry if you help it along with your carelessness.

We followed a new road over the Ozarks one season and along a mountain river we discovered a most delightful camp. Some kind landowner had provided it for the free use of campers. There were tall shady trees and an abundance of clean grass, picnic tables and benches and a concrete outdoor stove for cooking. A small spring had been rocked up to supply drinking water. Even a pile of dry fuel lay at hand so there could be no excuse for cutting standing timber. It was a very welcome sight to road-weary pilgrims.

A year later we drove over the same trail and watched with eager anticipation for our old friend, the camp. But when we arrived, it was a sad sight. Evidently the worst possible class of rubber tramps had come by in the interval between our visits. Now a self-respecting dog wouldn't stop there to scratch a flea bite. The ground was littered with old papers, dead fish, rotting straw and tin cans that buzzed with mosquitoes and flies. Several trees, fine ones too, had been haggled with dull

axes. It was just one more example of how ignorance and carelessness destroy the beauties of Nature.

You can always spot the camper who is a good sportsman. If the camp is provided with cookstoves, he prepares his food quickly and makes room for the next fellow. We saw a pair hog a stove for over an hour out in an Oregon camp. The good sport doesn't try to cook up a week's supply of food simply because the fuel is free.

In the bath house the sportsman camper is quiet and orderly. Sometimes, however, one is justified in being a bit noisy—for instance, the lady who had her clothes stolen while she enjoyed her shower in a Wyoming camp bath house. From the way she talked one would judge they were her sole garments. She was speaking quite fast and feverishly through the closed door to the camp custodian, a retired cowboy with a drawl and high riding boots. We couldn't stay to witness the conclusion of this short short story but, if that custodian was as resourceful as a fellow on his particular job must be, he doubtless got things fixed up some way.

Chapter XVII

DESERT AND MOUNTAIN TRAILS

DESERT roads remind us of the time when some goats played strip poker with a motor camping friend's outfit in eastern Nevada. The car must have put up a mighty poor game, for when the owner returned after a half-hour's absence, he didn't recognize it. The sadly denuded motor looked more like "September Morn" than like a well-equipped automobile.

The family had incautiously left their car beside the road while they wandered away to pick the short-stemmed flowers that carpet the desert hills in early spring. The goats happened along. They were weary of browsing through the dry brittle brush and craved more palatable food. So they attacked the tent, seat cushions and top of the car. One whiskered old patriarch stood on the hood solemnly devouring the last shred of the open car's top when our friend arrived. If he could have found a gun just then, we believe the local markets would have been glutted with fresh mutton.

Motorists see large flocks of these animals in the desert and arid regions of the Southwest and no one,

after a good look at the country they pick over for a living, can blame them for relishing a mouthful of nice canvas tent or seat padding. So watch your car if you pause on the goat range. These animals have the same

(*Blackington from Nesmith.*)

The desert trail has its fascinations and beauties as well as its difficulties and dangers. Here, in New Mexico, a modern car has stopped close by an abandoned Indian covered wagon.

thrifty instinct as the burro we saw near the top of a copper mine shaft at Globe, Arizona. He was patiently and cannily devouring the colored supplement of a Sunday newspaper plucked from a refuse can.

Abandoned wrecked cars sign-posted some of the most treacherous pieces of desert road when the first motor

campers turned their faces westward and toured to the Pacific Coast. An old-timer in the game, one of the very first to cross the Nevada desert, told us he saw several stranded automobiles on his first trip. Half-buried by the shifting sand, they had been left beside the trail when their engines stalled for lack of water or oil or both. Crouched in the seat of one car was a fleshless skeleton, its bones showing the toothmarks of coyotes. This driver had stuck with his car and perished.

But these things happened many years ago. Today the deserts are safe, attractive and interesting to tour. It is difficult to reach the Pacific Coast from the East without following desert roads of some nature. Even those who use the northwest trails must cover miles of sandy wastes in Oregon and Idaho, but this fact should not worry or discourage even the most timid motorist who wishes to cross the continent. If he observes a few simple precautions of common sense, desert travel will have no terrors and but few discomforts.

He will get a big kick from the desert. He will be thrilled with the magnitude and the loneliness, the brilliant sunsets, the bracing air and the purple hues of twilight. A full moon on the desert makes it all swim in a sea of soft warm light that has a charm exclusively its own.

After the first trip a man can understand why the grizzled desert rat plods patiently behind the pick-and-shovel-laden burro for the greater part of his life. It is not entirely the fading hope of an El Dorado strike that keeps him braving the chill nights and blasting days

of the desert. There is a tang, a bracing tonic, yet a soothing touch in the immensity of its lonely wastes—something that will not tolerate cramped, narrow thoughts and that makes desert life, despite its hardships, inspiring and vivid.

Modern desert roads are good. A car makes splendid time over any of the national highways, with hardly a chance of getting stuck or stalled. There are water supplies not over thirty miles apart. Some tourists drive over the Mojave without extra water bags, but this is hardly wise. Unexpected emergencies, like a boiling motor, a leaking radiator or more serious car trouble, might cause delay until an extra supply of water would be vital.

A car will probably boil in crossing the desert in the summer season. It will also use more oil because it is working at a higher temperature. It will do no harm to carry at least one quart of extra oil—many desert motorists keep a half-gallon on hand—and two gallons of water. As long as plenty of good oil is kept in the motor, a grade that will not break down from the heat of desert driving, and the radiator is kept full of water, boiling will do no harm.

Travel at a moderate speed—thirty-five to forty-five miles per hour—and stop often to refill the radiator. If the engine boils unusually hard, you may have to stop and let it cool down every half-hour. Do not run long enough to half empty the radiator. But if you should, wait before you pour cold water in on the hot engine. You may crack a cylinder head or even the block.

Don't carry too much air in the tires. Fast driving and desert heat will run up the pressure enough to blow out a worn casing. If you enter the desert with thirty-five pounds of air pressure you may have forty-five before you get very far across the hot sand. If you run into a stretch of loose blown sand (it sometimes drifts over the roadbed) let out some of the air until the tire is rather soft. It will then ride you over, whereas a hard tire would cut down and bury itself.

The hot, dry wind is the worst discomfort in crossing the desert. We have crossed the Mojave in August, obviously the worst possible season to make the trip, and it was very hot. Coming east from California, the worst of the heat starts in at Needles, California. The wind blows a regular gale, so strong you have to lean against it to walk, and the air has a shriveling heat, as if it came directly from the door of a blast furnace. The temperature was hitting 130 degrees but, being equipped to cope with this heat, we got across without any actual suffering.

We carried plenty of water. We had an iceless refrigerator on the running board that gave a constant supply of fairly cool water through the principle of evaporation. Then in the car we carried a gallon canvas pail full. Two tin cups floating on top of the water in the pail kept it from slopping as we drove. We wet clean handkerchiefs and towels from the pail and wrapped them about our faces, particularly the nostrils.

This did much toward making the hot afternoons on the desert bearable. Beginning at two o'clock in the

afternoon, the desert in midsummer turns into a blazing inferno of heat. But the moisture in our wet towels seemed to strain the worst of it from the wind and when we breathed the air seemed actually cool.

We wore hats with wide brims to protect our faces from the glare. When the sun shone straight into the side of the car we plastered our skins with cold cream. Cheeks and faces should be kept well greased or they will chap painfully. Driving glasses of a violet or an amber hue are necessary to protect the eyes. Everyone in the car should wear them.

Motor campers are generally advised to leave San Bernardino in the late afternoon, when driving east across the Mojave, so as to cover the worst stretches in the cooler night. This is good advice in some cases—bad in others. If one can push along fast enough to get over the desert into the cool mountains of Arizona by daybreak, it is good. In that case he will have a more comfortable temperature to sleep in during the day, for sleep is vitally necessary to anyone after having wheeled a car over several hundred miles of desert.

On the other hand, if the tourist will not be able to get clear of the desert by the time for sleep, it is better for him to cross by day, starting at sunrise. Then when night falls he can sleep well, since the nighttime is cool and pleasant, even in the middle of the Mojave. If he drove by night and tried to rest by day his sleep would be miserable. When the sun once gets up and begins to blaze down on the sand, only Mexicans and rattlers can sleep.

Fruit should be eaten in preference to drinking much water. When we crossed, oranges were selling for very low prices in California and we bought a bushel of good ones for a dollar. We ate them whenever we felt thirsty—ate very little else during the day—and we were fresh and strong when the hard trip was over and the mountains of Arizona lay just ahead.

Whoever travels on the desert in winter must provide for very cold nights. One can almost freeze there in late fall and will surely do so in midwinter if he lacks plenty of warm blankets and clothing. A desert can be both the hottest and the coldest place you ever ran into, so equip yourself accordingly. Take plenty of wool blankets for each cot or bed or use sleeping bags, if winter finds you on any of our deserts.

Very little animal life is seen on the desert from the highway. We have crossed four times and in those four trips we saw only one live rattlesnake. Many nights we have camped on the sand without pitching the tent. We spread it out flat and laid the beds on top. That gave us the full benefit of the night wind, which blew cool and strong before morning. We needed a heavy blanket even in August. There is no need to worry about snakes. They are seldom found in the sandy wastes but are more liable to be among rocks and rock ledges.

Don't camp in a dry wash. It sounds inconsistent but is true, nevertheless, that heavy rains, regular cloudbursts fall in the desert and in thirty minutes turn these dry gulches into roaring, rushing flood streams, so

quickly does the water drain off the rocky slopes. Camp always on high or level ground.

We once chipped in on a subscription of money to help out a tourist who had pitched his tent in one

(*Philip D. Gendreau.*)

The fantastic Joshua tree of the Mojave and other desert regions is a yucca cactus, bearing seeds which the Indians grind into meal.

of these dry washes. Rain hadn't fallen on the desert for over six months, but his luck was poor and a cloudburst washed his tent and car across the sands and nearly ruined the latter. The family scrambled up to high ground just in time to escape drowning. Some of them

would have lost their lives if a pet terrier hadn't barked and warned them of approaching danger.

The Joshua trees are one of the desert attractions. The motorist passes through forests of these queer, grotesque plants covering thousands of acres. As nearly as we can figure it out, the Joshua tree is a cross between a cactus and a cedar—and a mighty poor one, at that. It bears large pineapple-shaped balls covered with sharp spines. The trees are gnarled, stubby and twisted and at night they may be mistaken for men with extended arms across the path, as they stand like ghostly semaphores along both sides of the road.

Fuel for the evening campfire is very scarce on the desert. Be sure that your gasoline camp stove is working and, if you should by chance depend upon an open fire to cook your meals, do as we have done—carry wood in your car.

If you run into a sandstorm, stop and close up the car. If you have an open model, it would be best to wrap up your head, to keep off the stinging crystals that will cut your skin like flint. The paint of the car may suffer in a bad sandstorm. In fact, we once saw a sedan that came down over the San Bernardino Mountains with one side ground bare. The sand had struck just half of this car and had cleaned it off as if a painter had prepared the surface for refinishing. It was quite a novelty that night in the little camp at the bottom of the grade leading east up and into the desert. Fortunately, however, such storms are rare. We have never been in one yet in any of our four journeys.

One of the meanest conditions for driving comes in crossing desert country with a tail wind driving along behind you and traveling at about the same rate of speed. It is impossible to keep the engine cool then. The only thing to do is to fill the radiator often and try to drive either faster or slower than the wind following—and to pray for it to change direction. We have toured in Idaho in July with desert temperatures prevailing and we always found a tail wind at some time of the day. At times we could run only fifteen or twenty miles before we had to stop to let the engine cool down.

The first time we started up one of those deceptive mountain grades that are found out west, we thought that the car had gone haywire. The road looked perfectly level ahead, it was smooth and hard, but the engine labored and pounded and we had to shift down to second gear and finally into first, to keep moving.

About that time anyone could have bought the outfit pretty cheap, but later we learned that this was one of the steepest upgrades on the Old Santa Fe Trail. That is an experience almost every motor camper has when he leaves his home in the level states and invades the rugged grandeur of the West. Mountain driving carries many thrills. If you want to keep from getting old, pack up the outfit and head for the Rockies. Detour a bit through Death Valley, camp among the Bad Lands of South Dakota and bank your tent against the Panhandle wind that sweeps across the red dirt of New Mexico.

Don't worry when your motor refuses to pull in high gear on some piece of mountain road. Many of the western states sit sidewise, are tilted at a precarious angle and, without a surveyor's level, you can seldom

(*Ewing Galloway.*)

On long mountain grades of the West, like this one in Mount Rainier National Park, gears and brakes should be used with great care.

tell whether the road leads up or down or is merely level. That is, you can't tell if you refuse to be guided by the car's performance. Many a time we have had our eyes deceived. We have followed small streams, close to the Montana or the Arizona highway, that appeared

to be running uphill. When the engine starts to labor, shift into a lower gear immediately, no matter how the road appears to your eyes.

Sometimes a steep upgrade will actually have the appearance of going downhill. But take the engine's word for it. If you think you might be going down, slip the clutch a moment and see if the car rolls on ahead. Have good brakes before trying this experiment.

At the top of long steep mountain grades you will find a sign reading, "*Steep grade. Descend in low gear.*" Heed that sign and don't rush by it without obeying. It was put there for the purpose of saving accidents and perhaps life. Shift into a lower gear and do it before the car gets too much headway, or you may find it impossible to make the change. Modern cars have splendid brakes, but the wise motorist saves them in the mountains and uses his engine's compression to check his speed downward. Five miles of stiff grade may badly burn the best grade of brake lining, and you will need it many times when you can't use the engine as a check.

A unique road material that the eastern motor camper meets in the West is gumbo. When it is wet, gumbo has it all over a poor relation or a barbed-wire fence for sticking to you. Dry gumbo, however, makes some of the finest roads we've ever driven over. The state of South Dakota has more of the genuine stuff within its boundaries, we believe, than any other—unless the thousands of motorists who have crossed it have carried the stuff away with them on their cars, their tents and their shoes.

An auto speeds over dry gumbo roads at fifty miles an hour easily, for they are well dragged and smooth. But let a few drops of water strike the gumbo and soft soap isn't half so slippery. Besides, it is as sticky as fresh taffy. The front wheels of the car will ball up with gumbo just as a snowball gathers size when rolled along in wet snow. If you keep on going they clog up until they can't turn and you will be pushing them straight ahead. Then it is time to stop and dig out the mud between tire and fender until the wheel can roll again.

The best thing to do, of course, is to stop and camp when rain catches you on a gumbo road. Fortunately the road dries up in just a few hours, if the rain was moderate, and you will always make better time by waiting than by trying to force your way ahead.

If the rain is heavy and long, then there are bigger and better reasons for lying up. We thought we could make the next town when a storm caught us in South Dakota, so, after the wind and the rain had ceased, we started on. I guess we went all of fifty feet before we landed with a splash in a first cousin of the bottomless pit. We got out and looked things over. The more we looked the less we liked it.

So we walked back to the first ranch and a friendly cowboy rounded up a team from the pasture, hitched it to a high-wheeled wagon and drove out to give us a lift. As soon as we got out of that hole we steered right over against the fence and camped. There were worse places ahead, and we waited until morning. Then the

sun dried up the mud in a hurry, the road drags came out and smoothed the surface down and we had excellent going again.

That storm was the worst we have ever been out in when motor camping. A half-hour before it broke we passed a large company of Indians who had stopped on the prairie and were busy making camp. Tepee poles were going up faster than derricks in a new oil field and we wondered why in the dickens they were camping so near to noontime.

But those red men or their squaws knew a thing or two about Dakota weather. When the storm came, we had to turn the car sidewise across the road to keep it from tipping over. As it was, the wind tore part of the top loose and we sat there holding up blankets against the side curtains to keep as much of the driving water out as we could. It was an open car and the curtains fitted about as tight as any ever did. We had an anxious twenty minutes, fighting those sheets of driving rain with the car rocking and quivering under the force of the storm.

So if you are touring out west and find a tribe of Indians making camp about noon, stop and ask what it's all about. If they tell you, "Heap big storm she blow," or, as is more likely, say, "We read signs of an impending storm in the sky," it would be better to follow their example and make a quick, substantial camp.

Down south on the less-used highways there are creeks and shallow streams that are still unbridged.

To be crossed they have to be forded. In times of low water this is easy, but directly after a hard rain those creeks may be pretty deep and high. One day, coming into Hot Springs, Arkansas, from the south, we crossed one such creek twelve times, fording it at every crossing. Each time the water was wider and deeper, until at last we had to hang a rubber coat over the front of the radiator and hit the creek at high speed. That carried us across before the distributor was drowned out and the motor killed. Often we would just reach the opposite side, with the rear wheels still in water, when it was killed. Then we had to wipe things off and dry the wires before we could go on.

If a rather deep ford confronts you, one that has been much used by wagons, do not follow over in their path. A wagon stirs up the dirt and sand on the stream bed and it is washed downstream, making the crossing continually deeper. We always turn upstream a few yards, if possible, and try to cross above the customary wagon route. The water there is less deep and easier to ford.

In our many years of experience on the motor trails we have been stuck with car and outfit in numerous mudholes. We have tried all the recommended means for extricating a car from bad places and we have finally concluded there is nothing more effective or satisfactory than a good, stout, well-fed pair of mules—or if it's in deep, a tractor. We saw one heavy car down a bank so hopelessly mired that four mules could not budge it. It yielded only when a farmer drove his

tractor out of a field and hitched on behind the teams.

Many of the methods whereby the motorist is to extricate his own car with block-and-tackle equipment, improvised windlasses, etc., look well enough on paper but seldom work out in the mud. Trees to hitch ropes

(De Cou from Ewing Galloway.)

Sunk in the soft sands of an almost dry river bed in Chaco Canyon, New Mexico, this car had to be released by the slow, arduous method of digging.

and lines to seldom, if ever, grow conveniently along the highway, as they are shown in pictures that illustrate these methods for getting out of mudholes.

There is one contrivance that we find perfectly practical. We have used it a number of times with success when there were no mules near. All that is needed is an ordinary rope towline with several stakes.

One can usually spin his rear wheels when he is stuck. So fasten one end of the rope around the hub of the right rear wheel. Take a hitch about the hub so that the rope will wind up on it when you let in the clutch. Stake the other end of the rope out ahead of you if you are trying to pull forward; stake it in the rear if you want to pull out backward. Use two or even three stakes hitched tandem to the rope to make it hold. Then start the engine and let in your clutch slowly. The hub will wind up the rope and pull the car toward the stakes and out of the hole. This plan works. We can guarantee it.

Motor campers, in their rambles over the plains by auto, may still find evidences of two of the three picturesque stages in western history and development. The first era—when the heavy guns spit fire and the exuberent cowboy jingled his spurs musically over the board walks before the saloons and dance halls—those days are practically gone.

Even Tombstone, Arizona, the last hangout of the bad man, the town whose boast was that "It had a man for breakfast every morning," slumbers peacefully in the desert sun. Millinery shops and tamale stands clutter the streets, replacing the gambling hells and wet-goods emporiums.

In less-frequented places, tourists still find signs of the big change that came when barbed-wire fences and nesters' cabins started to split up the mammoth tracts of grazing land. This constituted the second era. The third stage, that of the dude ranch and the hot-dog

stand, is liberally represented along any of the main cross-continental highways.

Interesting landmarks of the middle era were those oddities in ranch fencing—the cattle pass and the bump gate. We find a few of those old-timers still on the Panhandle and in certain sections of Arizona and New Mexico.

In the grazing country, the ranches are still large. They contain thousands of acres, but this land is too low-priced to justify the expense of fencing both sides of the highway, as is customary in the farming states. Therefore the different ranches or grazing tracts are separated merely by a line fence—two or three strands of barbed wire strung on posts of mountain cedar.

Usually these fences cross the road at right angles and, to keep the stock on its proper side and yet allow a free passage of traffic, the cattle pass is built across the roadbed. In principle this pass is similar to the metal guards at railroad crossings which prevent stock from straying up a right-of-way. A pit about two feet deep is dug in the center of the road and covered with a bridge, or grate, of iron bars or lengths of gas pipe. The grate offers no obstacle to automobile tires, but the cattle are afraid to cross it. The fence is built up close to either side of the bridge.

Beside this pass is set a regular gate, usually of the rattlesnake type, to be used by saddle horses and teams, since the horse shares with the steer the hesitation to step over a bridge of bars. Sometimes we would find, instead of the rattlesnake wire gate, one built of solid

lumber—a heavy affair swinging between fifteen-foot posts. These gates are hung and balanced so that the cowboy can ride up beside one, give it a quick push and ease his bronco through before it swings back and closes automatically.

Everyone knows of the cowhand's aversion to dismounting from his saddle. It is rank "pisen" to his soul whenever he must make use of his nether limbs for purposes other than kicking his mount in the ribs. We imagine that a cowhand invented and built the first gate of this swinging, self-closing type.

In our early touring days we learned to manipulate these gates without dismounting from *our* mounts. Those calf wranglers had nothing on us! We drove slowly up and pushed the gate open with the bumper on the front of the car and then sneaked swiftly through before the huge pendulum-like affair swung back to sideswipe us in the flank. Hence the term "bump gate."

Besides regulating the movement of the vast grazing herds and of automobile traffic, these gates and cattle passes served as countryside bulletin boards. We passed through several that carried a notice of "$500 REWARD DEAD OR ALIVE!" Election posters, too, were advantageously displayed on the sides of the gate and the posts supporting it. But the "$500 REWARD" told us that a few hangovers from the "good old days" remained, and that the West was not to be known only by its dude ranches and rodeo shows. Men were still men out in the great open places and we drove on cheered and heartened by this knowledge!

Chapter XVIII

WOMEN MOTOR CAMPERS

WE advise women to skip this chapter, since it starts with the tale of how a dish mop and a camp table cluttered with unwashed dishes nearly wrecked the good ship matrimony.

It happened in a Minnesota camp and the lady presiding over the table of unfinished camp work had red hair. We suspect there was a bit of Irish in her ancestry, too. Friend husband had skillfully and swiftly packed the tent and the cot in the car and considered his camp work done. He sat behind the wheel and punctuated the moments with impatient honks of the horn while the light of his life vainly tried to catch up with her tasks.

We won't care if we never see another woman as angry as she was. We had walked through the trees to see what all that honking meant; maybe a fellow camper was in trouble. He was, but we doubt whether he realized just then how bad or how deep. When we saw that it was merely a case of domestic misunderstanding, we tried to slip back unseen; but it was too late, the

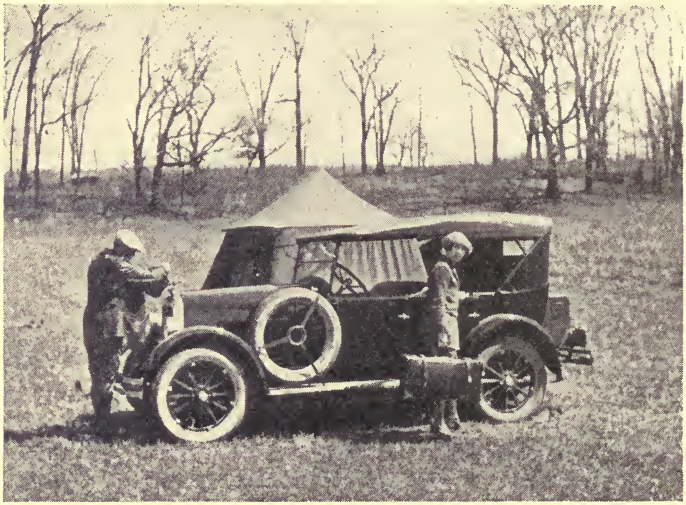
lady had discovered us and we were called forth to witness her declarations.

She had plenty to make. "Look at the big bum!" pointing at friend husband who tried to grin but only achieved a sickly imitation of a man seeing humor in some situation. "Every morning he folds up the tent and hops in the car, hollerin' for me to hurry. He thinks he's done his share of the work. He keeps tellin' me to hurry or we won't make the next camp ahead. He don't do a third as much work as I do. He eats like a horse three times a day and I have more dirty dishes than if I cooked for a harvest gang. Wait till I get home! My brother's a lawyer and he'll fix that big stiff when my divorce comes up!"

We withdrew as quickly as we could from the scene of connubial happiness. We really doubted whether the lady meant all that she said, but if she meant only part of it, that was enough to start us thinking. As we approached our own camp, we soberly wondered whether we had been doing our share of the camp work and whether we were overlooking anything in our power to help our own matrimonial partner to enjoy her vacation too.

We knew we hadn't shifted as much hard work onto her shoulders as a fellow from our own state whom we passed going up the Cody entrance into Yellowstone Park. He and his wife had a light roadster but the rear was piled up with baggage as high as a load of hay. The lady was out of luck, for she was down behind pushing. She couldn't drive, or else her husband had

made her believe she couldn't. He was jamming in the low-speed pedal like a football player kicking goal in a headwind. The car labored and knocked and we believe that only the lady's strength kept it moving up that steep grade that leads for miles toward the clouds.



When both members of a matrimonial partnership share the work and the cares of camp life, both can take part in the play and relaxation, too.

We ran up close behind and invited the lady to get in. We were moderately loaded and were making the grade easily in second gear, so we slipped back into first and, planting our bumper against the spare tire of the other car, shoved the outfit to the top of the mountain.

There we paused before starting down the other side. The lady wiped her heated face with vigor. "I've pushed

that blamed (it might have been a stronger word but we're giving her the benefit of the doubt) car half of the way from home on this *pleasure* trip! Thank Heaven we're nearly to the end. It's too far to walk back now so I guess I'll stick it out. At least I get to ride downhill!"

The man sat humped up behind the wheel like a wet hen and never opened his mouth. He didn't even thank us for our help; perhaps he considered that we hadn't aided him any—just his wife. And perhaps he hadn't had much practice talking since they entered rough country. Something told us the lady had probably monopolized the conversation.

You must agree that a woman like that was a good sport. We didn't blame her for talking between her spells of violent exercise, for pushing even a light roadster up Shoshone Canyon is no small job. If she had any breath left at the top, we say, let her talk!

As a rule we have found women darned good sports on the motor camping trail. In fact, many of them are better sports than some men we know and we would rather have them in our party when things start to go wrong. During the many thousands of miles we have motor camped, we have met women of all temperaments and from all positions of life who were living just the same as ourselves on the highways and in the camps, and nobody need tell us that a woman can't adapt herself to the sport and like it. Any lulu that does, wants to watch out. We might be tempted to make a pass for his jaw.

Women can and will adapt themselves to the rough sides of camp life and they generally do it with a grace that makes many a man look like a hound dog with the itch. We met one whom we have always remembered with admiration for her plucky spirit.

Twelve years ago there was a lot of bad road through the Datil Forest of New Mexico. In the fall months, heavy rains washed out the clay trails until we passed over them only by creeping along at ten miles an hour. They were, in the parlance of the region, "slow" roads. Several times we had the family get out and stand on the opposite running board to balance our car and keep it from tipping over in the worst washes.

Once, just about camping time we found a big eight-cylinder sedan in the center of the road with a broken axle. There was a light rain in the chill air. We drove up beside the car and stopped. A young couple were huddled in the front seat under a pair of auto rugs, waiting for somebody to come along and either pull them in or go on and send back a towing car from the garage in Springerville, which was thirty miles ahead.

Night was close and our car was too light to drag in this two-ton sedan over thirty miles of bad mountain roads. The big strong he-man of the outfit was huddled under the wheel smoking a cigarette. He seemed to have most of the rugs wrapped about his own legs and his conversation was limited to grunts.

His wife agreed that the best thing we could do would be to make camp and help them spend as comfortable

a night as possible and then send out the towing car next morning.

So we drove over to the edge of the pines and began to make camp. The man poked his head out of the car.

"I don't want to camp out," he complained. "I want to get to town, where there's a hotel and a garage."

"But, Oscar," his wife answered patiently. "This gentleman" (we unconsciously straightened at the word and reflectively rubbed the two-day stubble on our chin) "says it is impossible. If they went on to Springerville they might not get there before midnight. No small-town garage will send out a towing car in this weather at such an hour."

She jumped down in the mud and pitched in to help us. She wasn't like the Texas gentleman we once saw stuck in a mudhole near San Angelo who hollered to a Negro two hundred yards away in a field to come and dig him out. The Texan never left his seat but threw out a half-dollar when the car was free. Both were satisfied.

But this girl wasn't from Texas. She couldn't do much, for she had never had a tent pole in her hands before, but the spirit of willingness was there. Her costume was more suitable for a ball than for making camp—all silk with satin slippers. The grouchy Oscar had stepped in a gingerly way on the running board, where he remained until she coaxed him off. Still complaining that he "didn't want to camp," he got in our way and bothered us until we wished he was back in his broken sedan. He was a complete flop as far as being any help to us was concerned.

How he ever got hooked up with such a plucky, sweet girl is one of the miracles of matrimony that we see about us every day. I doubt whether either of them had ever done any work with their hands; but she was eager to try, while he wasn't.

Oscar was searching his pockets and now he let out a yelp of distress. "My cigarettes are gone! I musta lost them." We reached in the door pocket of our car and fished out an extra pipe. We offered it to the smoke-craving Oscar with a package of Bull Durham, but he shuddered and turned away.

We did all we could for this stranded couple who had been traveling de luxe, stopping at hotels and having a grease monkey get the car ready for them each morning. They didn't have even a package of chocolate with them and hadn't eaten since early noon, so we fed them substantially on hot coffee, steak and spuds. Hot food stopped Oscar's monotonous plaint that he would rather have gone to a hotel, and for a while we thought he was going to become almost human.

But he kept glancing apprehensively back into the dark timber every time a branch snapped or a big owl hooted in the pines. He acted as if he feared some big bear would rush out and drag him off. We could have told him that New Mexico bears were a bit uppish about what they took home to the wife and cubs and that he was perfectly safe.

We laid the front-seat cushion of their sedan against the rear seat and made them a comfortable bed in the back. Then we loaned them a pair of blankets and slept

in our shirts and trousers ourselves to make up for the lack of the covers. We helped tuck the petulant Oscar in for the night, still complaining that he "didn't want to camp."

Next morning the sun was shining. We tossed up a few dozen flapjacks and broiled innumerable strips of bacon. Their fragrant odor brought Oscar out from his improvised couch as stiff as a new set of pistons. His wife had jumped gaily out five minutes before to admire the dawn. It was a dandy, the air filled with sweet smells of pine and glistening drops of dew on every bush. Crested quail flew across the road on their way to feed in the open places. Such a daybreak should have put heart into even a guy who disliked to camp!

We left them after promising to shoot that towing car out from town pronto. The girl stood beside the big sedan and waved her hand as we left, but our last glimpse of Oscar showed him crawling back to his rugs. It didn't take much imagination to hear his whine, "I don't want to camp," as we rounded a curve in the trail that hid them forever.

As somebody's girl friend might say, "Wasn't he a mess?" All we could think was, "Wasn't *she* a peach?"

Many times women will display a presence of mind and an ability to cope with emergencies much appreciated by their masculine companions. On a late winter tour we struck about three hundred miles of glaring ice. You could have skated the entire length of that highway just as fast as we drove over it. After half a

day of this sort of driving, we were tired and the lady took the wheel to relieve us.

The road suddenly ducked down into a valley and at the bottom our car started to slide slowly but irresistibly from the high-crowned roadbed. With rare presence of mind the driver turned the front wheels squarely over

(Philip D. Gendreau.)

In a camp beside beautiful Schroon Lake, New York, in the sweetness of a summer day, the lady of the tent lends grace to even a homely occupation.

the bank and sent the car headfirst down instead of waiting for it to tip over sidewise. When we hit the bottom, she turned and gave it the gas and we shot on a hundred yards to a driveway that permitted us to get back in the road.

Again, we were camping in the Flambeau Lake country of Wisconsin, studying and photographing wild

life. Every morning we would get out early and examine the soft dirt around the tent for tracks that would disclose the kind and the number of night visitors who searched through the camp for scraps of food. Every morning we found evidence that a large skunk had waddled about the tent and had even stopped to sniff in the screen-closed door.

So we were not surprised one evening, as we came home with the camera, to see a bushy black object turning into the clearing ahead of us. We stopped, thinking that if the skunk was not alarmed, he might show up some day when the light would be good enough for a snapshot.

The animal nosed at an empty pan, smelled of the water pail and then walked straight for the tent door. Our knees sagged a bit as we saw him approach it. Judging from the sounds inside, the lady was busy sweeping the floor and we knew that she yielded a pretty mean broom.

The skunk paused only a moment and then, to our horror, stepped inside. We started to cry out a warning as it disappeared from sight, but our mental agony was too great for words. That tent had cost over sixty dollars and it was going to be worth less than sixty cents for camping when the skunk got through with it. We hadn't the slightest doubt but that he was going to collide sharply with an energetically swung broom and then the fireworks would begin.

The sounds of sweeping ceased. We got ready to pinch our nostrils between thumb and forefinger. Then we heard a firm voice. "Scat! Get out of here!"

Our eyes popped as the skunk emerged with dignified haste. He stepped over the doorsill rather hurriedly and we saw that the broom was pushed firmly against his dangerous end.

When the skunk was clear outside, the broom was withdrawn and the sweeping resumed. The skunk came straight to where we stood and we froze into a statue and held our breath. His skunkship had been outraged; maybe we were going to pay the price!

But the animal passed with merely a side glance, as though it said, "Your turn now, Old-timer. I hope you have better luck than I did."

That was an emergency, too. When a skunk walks in at our tent door, we don't let a mere window screen prevent our exit. This lady camper used just enough tactful force to convince but not enough to provoke the unsavory visitor. Violence would surely have brought on the smoke screen for which he and his kind are noted.

In many camps and on many trails we meet women camping and touring alone, unattended or unhampered (just as you wish to put it) by men. They are enjoying their vacations, getting along splendidly, without any trouble or grief. When something does turn up that requires the strong assistance of the male, there are plenty of representatives ready to lend a hand.

This recalls two school-marms who were hitting the South Dakota trails in lone-wolf fashion. The first time we noticed them was in Pierre. They were camped two cars away and in the morning one strolled over to ask

if we would crank their car in case it did not respond to the starter with cheerful promptness. The battery was dead.

Of course we agreed, but we noticed that our fair visitor sort of lost interest in our proffered help when the better half came out of the tent and coolly looked over the scene. A few minutes later, we saw the lady teacher tourists stepping into their coupé. We flexed the muscles of the good old right arm tentatively and waited for the signal of distress. But it did not flutter in our direction. A pair of lively youths appeared from thin air and graciously did the starting honors. That balky engine whirred like an airplane motor in their capable hands. The ladies drove up to the gate of the camp and waited until the two youths followed with their own outfit and the foursome drove away.

"Humph!" said the lady of our tent. "They were just looking for somebody to tag along and do their work. I'm glad you had more sense!"

In Rapid City we spread our camp beside the trout stream running through the motor campground. As we were getting out the fly rod and tackle, two cars appeared at the gate. There were our old friends the helpless school-marms and the lively youths. We watched them drive in and, when the cars stopped, the youths leaped out and fell to work assembling both outfits. They were well in hand already.

"What did I tell you? Come away from there! I thought you were going fishing. If you haven't anything

(*Ewing Galloway.*)

The "better half" who goes fishing with her husband can keep an eye on him while enjoying the sport and building up muscle and vigor.

to do besides watching those silly folks, I'll find something!" You can easily guess who said that.

There are some women who might not enjoy a motor camping vacation, but we think they are surprisingly few. Camping brings health and vigor to many who would acquire it in no other way. Living and sleeping in the fresh air and the exercise of camp life that builds muscles seldom used in home life combine to foster rugged health and steady nerves for many women who had never enjoyed a real vacation before they followed the motor trail.

Chapter XIX

AMUSEMENTS IN CAMP

TWELVE years ago motor campers didn't worry much about amusing themselves in camp. Then, when they stopped for a couple of days they found plenty of things to do that killed all desire to hunt up separate thrills. Early in the game, camps were not equipped with labor-saving conveniences. After the lady of the party had finished rubbing out the soiled clothing beside a mountain stream or at the old town pump, she was glad to relax for a few hours and merely rest.

It was the same, too, with the men. Rough roads were the rule rather than the exception and many times we came into camp pretty well tired out from fighting mud and rocks. We had to go over the car and tighten up things, clean and grease bearings and perhaps patch a tube or two. We would reline the brakes and grind valves, right in camp. When the sun set we would be hunting up the bunk more often than amusements.

But now our camp work has been lightened and simplified so that we have considerable time on our hands. Being like the rest of the moderns, we feel a

desire to start something or to do things when we stay long at one camp.

If it is near water—a lake, a river or the ocean—we can easily gratify this impulse. There will be a number of interesting sports to follow. We can canoe, swim,

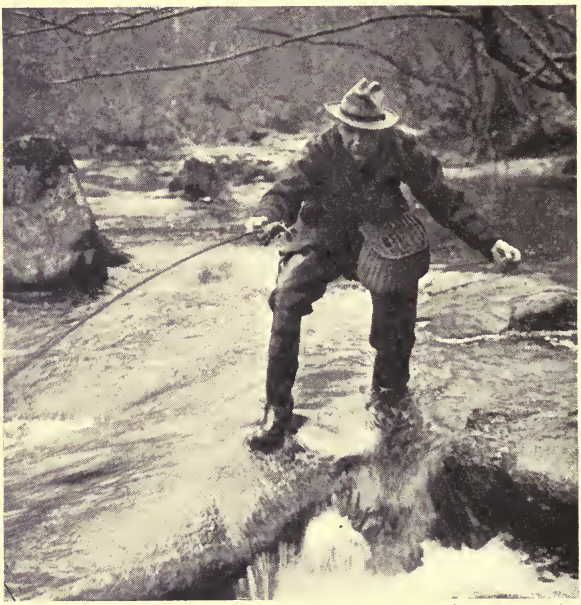
(*Wide World.*)

In the modern tourist camp, like this of Dade City, Florida, housekeeping is so simplified that both men and women have far more leisure than in earlier camping days.

motorboat or fish. Many campers carry their own outboard motor to install in rented boats. A few others pack the complete outfit—boat and motor both—behind the car on a trailer.

Many good camps are located close to good fishing. This is a very popular pastime with motorists and almost

every outfit includes tackle of some nature. There is good fishing east, west, north and south, both inland and surf or deep-sea fishing.



(*Ewing Galloway.*)

The born fisherman can try his luck on almost any tour; streams, lakes, and seas invite him and his outfit is easy to carry along.

You will find the sporting goods stores and the chamber of commerce in any city willing to inform you on the prospects of good fishing. They will also aid you to procure the proper licenses. Sometimes it is possible to take out a short-time permit which, being of lower price than the regular yearly fee, is very convenient

for tourists. When you get ready to fish, inquire whether such permits are available.

If you are camping in any of the large national parks, you will have remarkable opportunities to study and photograph wild life. This is an absorbing sport, just

(*Ewing Galloway.*)

A good companion almost anywhere, the camera can make a priceless instant of fun or pleasure live on for the rest of your life.

as thrilling as hunting with a gun. Campers spend days in the Yellowstone getting acquainted with strange animals and birds.

Photography is a fascinating amusement. With a camera you can preserve a permanent record of your good times on the road and in camp and have it to enjoy

in future years. Even the kids should be given cheap cameras to use. Low-priced models will take excellent pictures. A Brownie with several rolls of inexpensive film will keep the youngsters out of mischief and give them a good start in outdoor education. Small moving-picture cameras are getting to be popular with campers. They help to bring back not only the picture but the action of the vacation.

In the wilder regions the camper may be able to hunt small game or, at least, to enjoy target practice with a small-bore pistol or rifle. But all these pastimes are more or less typical of certain localities and conditions. What the majority of us want is amusement that can be enjoyed in the average city camp that is not on a lake or the ocean or adjacent to hunting and fishing.

Well, for one thing, it is best to carry a pack of playing cards. We always do, and if we can't organize a good poker game behind the laundry shed, we clear off the camp table and resign ourselves to a few hands of bridge. Cards offer an admirable means of passing lonesome hours or rainy days in camp. Some campers can play solitaire for long periods and still get a kick from the game.

We have never had any more fun in all our lives than we did the week we played horseshoes in a New Hampshire camp. We stayed there a full seven days and the only dull times we can remember came when the meals were served. A fellow from Florida started it. He had a set of horseshoes in his car and began a game. Every-

body got the fever and before night there were a dozen games going fast and furious. We all drove into town and searched for horseshoes. There was almost a corner on them for a time and some of the bolder spirits threat-

(Courtesy Pinches Pleasure Trailer Corporation, N.Y.C.)

There is, perhaps, no more generally welcome source of entertainment than a pack of playing cards, winter or summer, rain or shine, outdoors or in; a handful of pasteboard, to be carried in a pocket, it is sometimes worth far more than its weight in gold.

ened to pull shoes from the first horse they found if they couldn't get them in any other way.

Talk about golf widows! There was a pretty big club of horseshoe widows in that camp! Try the game when you need good exhilarating exercise. Quoits are also good. The equipment to enjoy either game is not bulky or heavy to pack in your car.

There will be plenty of opportunities for golf—both regular and miniature—so take the bag of clubs with you when camping. A man thoroughly inoculated with the bug can even spend many interesting hours putting around the tent or practicing with one of the obstacle

(*Wide World.*)

Among the outdoor sports in this Florida camp is shuffleboard, attracting both men and women players.

sets sold to fit up individual holes. Don't pay any attention if some of your tent neighbors look at you with a pitying expression. They have their own weaknesses and some of them may be a darned sight worse than golf!

We have met a number of writers who combined work and pleasure by packing their typewriters along on

motor camping tours. They spend busy hours in camp, pounding out copy that is stimulated by their outdoor experiences and their close contact with human nature in all its variations.

Some outfit in the camp will probably have a radio or a portable phonograph and will give the enterprising camper the opportunity to organize a dance or a party at which everyone can have a good time. Occasionally a camp is equipped with dance hall and stage where campers with talent are invited to put on any clean entertainment they wish.

Sometimes the managers of forestry camps are supplied with lantern slides to illustrate the lectures on natural history which they give regularly to assembled campers. Days in your camp need never be dull. When everything else fails, you can always close up the tent and take your car for a spin out through new scenery.

Chapter XX

CAUTIONS FOR MOTOR CAMPERS

AFTER we had watched a fast train scatter a well-loaded automobile all over the landscape we began to pay more attention to blind crossings. It was a sedan that had stalled on the tracks (a starter had stuck or there was some other trouble). We were creeping up to play the good Samaritan by pushing it over when we heard a shrill whistle. A train was coming like a streak of lightning and we almost stripped some gears getting into reverse. The people in the stalled car had just time to leap out before the smash came. Auto parts and camping equipment filled the air for a moment and we doubt whether we could have found a piece of either that was over a foot long.

From that time we have approached blind crossings very slowly and we get a good view of the track both ways before we go over. If the grade is rather steep, we slip into second gear to eliminate any possible chance of killing the motor. Sometimes a dead engine doesn't start right away when you're in a hurry. At very bad crossings we stop and let someone run on ahead to give

us the high sign when to go across. We lose a minute or two of time by doing this but console ourselves by remembering that a first-class wreck might give us all eternity with nothing on our hands to do but wish we could go motor camping.

"Drive carefully, you may meet a fool"—roadside advice to be taken to heart and acted upon in any part of the world.

Motor campers should be particularly careful and alert to guard against accidents and mishaps. Any trouble they may have when touring may be quite costly in time and money and may mean a shortening of the vacation, to say nothing of the physical grief that might result.

There are always hazards in driving on modern highways. You might save two or three minutes by taking chances but, as some wisecracker has said, "What will you do with them?" Sane, safe driving is the wisest course for any driver and more particularly for the fellow who has his family and a lot of equipment loaded in his car and is headed out for a good time.

It does not always pay to insist upon one's full road rights. We hate to be imposed on, but when a road hog shows a disposition to take most of the highway, we give it to him. The mere fact that we were in the right won't replace a damaged fender or make up the time we should lose by waiting for repairs.

Watch out for children playing in or near the road. Look out for side roads whose approach is concealed by hedges or growing crops. We formerly advised fellow motor campers to watch out for women drivers also, but now some of the best drivers we know are women and this advice would hardly be consistent.

If you are going over bad roads, it sometimes pays big dividends in time to stop and poke around in the worst-looking places with a stick before you shoot into them. First, find out how bad and how deep the mudhole is. We've crashed the gate into some places that looked innocent enough, but one of them hung us up on top of an Arizona mountain all night. It was 10,000 feet high, that mountain, an elevation one would expect to be perfectly dry. But we stayed there until morning, sleeping in the car the best we could. A forest ranger jerked the car out with a pair of half-broken mules

after we had walked three miles to his cabin for help. The mules were somewhat stubborn at first and refused to pull. After the ranger has exhausted his stock of encouraging phrases and ejaculations without results, he ordered us to blow the horn sharply and suddenly.

The driver who disregards this New Mexico road sign does not deserve a driving license.

We did, and the next moment we came the nearest to flying in an auto that we ever want to come. The car landed on solid road thirty feet ahead with one leap and we have never got over the shock of surprise when we found that the front axle was still in place!

It is the steady driver who makes mileage on long tours. Driving by spurts is hard on both car and driver

and won't cover the route any faster. There is no use trying for any of Cannonball Baker's records anyway, when on a vacation tour. The motor camper is out for a good time, not for speed records.

So don't crowd a two-week tour into one. Plan a shorter trip if your time is limited. You can't appreciate the full pleasure of motor camping when you rush around trying to make every camp on scheduled time. About 200 to 350 miles a day is the average, depending of course upon your car, yourself and the country you are touring. If the scenery is worth looking at, go slower. You need time to camp and relax and rest, so stop early in the afternoon.

Watch the lights on your car to see that they all function in a legal manner. Some of the constables in small villages like to drag in a tourist for some minor offense. Don't give them any chance. In case a highway cop does crowd you over to the side of the road, don't get sarcastic. Fair talk will pull you out of many small jams, while if you act fresh you will probably get the limit. Cops like to put a fresh guy in his place, and they are quite expert at the job.

If you break down, be patient. If you are pleasant and agreeable, everybody you come in contact with will do just that much more to fix you up in a hurry so that you can be on your way. A mechanic might not talk back if you were abusive, but he would be justified in adding a few dollars to your bill.

Above all, don't pick up anybody on the road and give him a ride unless you know who and what he is.

Even then, go slow. Let the highway moocher walk or ride with somebody less sophisticated. Never take one in. It is risky and dangerous. Some of these pests are irritatingly insistent. One of the few times we ever were so careless as to run out of gas, it was late in the evening. But we were on a main highway and managed to coast right up beside a gasoline pump before the motor died completely. Just as the car had warned us it was low on fuel, a moocher had tried to wave us down from his station beside the road, but we ran right past as we always do. He was a hulking, tough-looking customer.

By the time we had filled the empty tank, he caught up with us and stood in the road watching us get ready to start on. We were suspicious that he might start something and, sure enough, as we eased out toward the pavement, he made a quick jump for the back of the car and started to climb into the open rumble seat where one of the children rode.

We jammed on the brakes and ordered him off but he kept on climbing in. Then we got mad and reached for the car crank and started for him. At that he climbed off and walked sullenly away. He saw that we meant business and, believe us, we did. It is a good thing to remember that a heavy crank is mighty good medicine in dealing with hulky moochers who won't take "no" as an answer.

Before motor camps were state regulated and inspected, one had to be careful of the water supply along the route. Most water was pure but occasionally campers would

get into trouble and contract typhoid or dysentery. Now the health departments of almost all states inspect the water at camps regularly. If it shows any infection or pollution, the supply is promptly padlocked and marked with warning posters.

In the forest and mountain country the motor camper may have to depend upon springs or streams for water and in that case it is wise to sterilize every drop before drinking. That old gag of "running water purifies itself" has taken a heavy toll from trusting campers. Nothing is more absurd or untrue. The clearest trout stream in the mountains may be badly polluted from camps or cabins farther up.

If you have any doubts about water, it is easy to sterilize it chemically or by boiling. Boil the liquid furiously for ten minutes and it will be safe to drink. Or procure from any druggist chlorinated or halazone tablets. They are low in price and easy to use, and they are accompanied by instructions for sterilizing water.

There should be a simple first-aid kit in every camping outfit. Such kits are sold by druggists already assembled in a neat package, or the separate items can be bought and packed in a light metal bond box, which makes an ideal container. The kit should include

Pair of tweezers
Small scissors
Iodine or Mercurochrome
One-inch roll of adhesive tape
Cotton gauze

Aromatic spirits of ammonia
Laxative tablets

Add to this assortment any medicines or supplies used by your family more or less regularly at home.

Sickness in camp is rather trying and of course the thing to do is to stay well. Watch your diet, do not expose yourself to cold or wet weather and guard against constipation. This latter is the basis of many kinds of sickness and should be carefully prevented in all members of the family.

Many dealers in camping equipment can supply a portable toilet seat that is used with special paper bags. These are very convenient in bad weather or sickness, or when aged people or small children accompany the party. They save exposure, can be used inside the tent or even in the car and a great many campers carry them so as to be prepared for any emergency.

The camper must not forget to take a small spray gun and a can of insecticide. Outfits of this kind are sold for a little over a dollar and they effectively control the situation when mosquitoes slip inside the tent and disturb rest, or when flies swarm around so thick that they are a serious menace. We would not go camping without such an outfit. It is just as important for camping comfort as a stove or a cot.

Chapter XXI

WHAT IT COSTS TO MOTOR CAMP

THE nearest we ever came to running out of money on a motor camping trip was one day when the fan belt on the engine broke. We were 170 miles from home and a careful audit of the treasury showed a balance of $1.80. The new fan belt cost $1.15 and we bought gas with the rest of our money. Believe us, even the children had to dig down in their pockets for stray pennies that time. We reached home "broke" but without having had to wire ahead for funds.

That was cutting things a little to fine for a pleasure vacation tour, but in those days we had not learned to budget our expenses on the trail; and, besides, an unexpected accident had depleted the cash reserve. One of the boys, slipping from the back of the car where he had no business to be, of course, had broken an arm when he struck the pavement. That meant a trip to a hospital, doctor's fees and several days' delay.

Naturally, everyone is interested to know in advance what a motor camping vacation will cost, whether it is to be spent in camp beside the sea or in steady driving

over the highways. This knowledge makes it possible to plan the trip and the attendant expenses in such a way as to buy the greatest returns in recreative pleasure with the money and the time that can be used.

Since a sensible budget for the family income works out successfully at home, why not extend the system to cover vacations as well? It will prove good insurance for coming out even in the matter of available cash and desired miles. A review of just what it costs to travel and camp with the automobile may help the tyro balance his books and save him those embarrassing moments that occur when a fellow is without funds in a strange town.

Obviously, one can make his motor camping trip very expensive if he wishes or he can cut down the daily costs until he is spending only a little more for living on the road then he would be spending at home. An occasional seven-course dinner at some exclusive hotel for a party of four or five can soon pile up an imposing expense account. So can hotel rooms for the party in bad weather. A few trips to some country justice's court when a speed cop puts the "Injun" sign on you for burning off more asphalt than the law allows will also help. Anybody can go out and "shoot" his roll on a camping trip. It takes careful managing and clever planning to have enough left for a new set of tires when the old homestead looms up in the road after a three months' tour.

On the other hand, if you prepare all your food in camp, sleep in the tent each night, demand fair value for each dollar you spend, drive sensibly and safely and

are lucky enough to avoid unusual emergency expenses, you can cover a surprising number of scenic miles for a small sum of cash. And you won't have to play the miser either.

There are several planes of motor traveling in between those of the tent dwellers and the hotel-room fans. A

(*Philip D. Gendreau.*)

Tourist cabins, such as these in the Adirondacks, help to solve the problem of automobile tourists who prefer not to camp in tents yet wish to avoid hotels.

few parties prefer not to invest in a tent but to sleep in the cabins provided at almost every camp or in private homes that advertise tourist rooms. To our notion this is more like plain traveling than like genuine motor camping life. Many of the thrills we get from vacation time will come from making our own camp and cooking our own meals.

In estimating the prospective costs of the motor camping vacation, one should remember that when he lives at home he continues to use gasoline and oil, fuel and electric current, to eat food and wear out clothes, just as he does when he travels, although not to so great an extent in some cases. So if he spends, say, $200 for a five-week camping trip, he can console the Scotch part of his make-up by remembering that he has not spent all those dollars for recreation and pleasure alone. Part of the money, a good share of it, too, would have gone for living expenses at home. And the fun of camping, together with the interesting sights enjoyed along the road, are always worth many times the difference.

During the fourteen years we have motor camped and toured, we have kept careful account of our expenses. Ten or twelve years ago we always figured on spending about $5 per day for a party of four, two of the four being children. This sum kept us well fed and sheltered and it included gas and oil, the food we cooked over our campfire or stove and the sundry incidentals that always bob up, generally at unexpected times.

We estimated the cost of our food at $1.50 per day. This money bought enough for four, despite the well-known effect of outdoor life upon the normal appetite. Gasoline and oil cost approximately $2.50 per day, making a total of $4 and leaving $1 daily for camp fees, toll bridges, ferryboats, punctures and the like.

In those days 150 to 200 miles was a good day's drive. Ten or twelve gallons of gas was the average consumption and at this rate the low figure of $2.50 would cover

the running costs of the car. But today roads are better, cars faster and tourists less patient. Instead of covering 175 miles a day, the modern motor camper will drive from 250 to 400, depending upon how early he can get the family started in the morning, upon where they are going and how much time is left before they must head for home. When going over uninteresting country or routes we have traveled before, we have driven as far as 600 miles per day so as to be able to enjoy longer the real scenic treats that we knew lay ahead.

This means greater expense per day. Besides, our living standards at home have climbed to a higher plane in the last twelve years and, of course, this means still more expense, for, naturally, we are going to spend more money when we live in camp and on the highways.

All this sums up into a necessity for doubling our old daily budget. A family of four could get by on $5 a day, but they could not drive any long distances or drive a very heavy car.

This increase does not mean that the things we buy have doubled in price—only that we buy more of them. We travel farther and faster than formerly and see and enjoy more in a day. Also, we expect more luxuries in camp. So $10 per day is now the regular budget. For a ten-day trip we figure on having $100 available for expenses. This applies to trips when we cover some mileage every day. If we spend half of our time in camp, the cost is cut materially, as our only expense on certain days will be that of food.

In addition to our regular budget, we always carry an emergency fund to take care of unusual expenses that are not a regular part of motor camping. The car might break down or collide with another, a tire might be cut or a spring might break. The boys might tear their pants on a barbed-wire fence or a cactus plant and the lady might suddenly decide that she needed a permanent wave. There is always a chance for extras to creep in and some of them can make a ten-spot look mighty sick.

The emergency fund should be about twenty per cent of the regular traveling budget. Take your cash, if it is a fairly large sum, in the form of traveler's checks. Then you are protected against loss should your wallet be stolen or lost. It would be better to hide the emergency fund where high-jackers won't find it, preferably not in the car, since those gentlemen of the road have a habit of taking money and car both when they interview you. Your wife's stocking is a good place, if you can't think of a better one.

Your $10 per day will be spent, perhaps, as follows, although, of course, no set, fast rules can be laid down. Most campers do not care to be bound rigidly to any routine on their vacation, and individual tastes and conditions vary greatly. But here is an average expense account.

Taking the price of gasoline to be 21 cents and oil 30 cents, we find that it costs from $5.50 to $6 to drive a car 300 miles. This provides for 20 to 24 gallons of gasoline (some cars will do it on less, even if ours

won't) and 3 quarts of oil. We allow for 3 quarts of oil each day because the crankcase of the average car should be drained every 1,000 miles or every third day. Putting the normal consumption of oil, other than draining, at 1 quart daily, this provides for the refill of 6 quarts at the proper time.

We have always watched this detail of oil change with religious care, which, we have found, pays big returns in trouble-free touring. We have yet to burn out a bearing in the thousands of miles we have driven over motor camping trails.

Food costs are but little higher now than they were ten or twelve years ago. Two dollars a day invested in plain substantial food will feed four adults heartily and healthfully. This leaves a balance of $2 to $2.50 for incidentals. Barring accidents or sickness, one will seldom have to dig down into his emergency fund. Campers who drive small cars may save as much as fifty cents out of our oil and gasoline figures and can add this to the incidental or the emergency fund.

Last season, we found another way to budget motor camping expenses very practical and interesting. This is to figure the expenses by the mile. It works out particularly well in cross-continental tours, when less time is spent in camp.

We discovered that it cost four cents a mile to keep four adults well fed and happy on the road. This covered gasoline, oil, camp and park fees—in fact, all of the legitimate expenses of motor camping except clothes, car depreciation and any unusual repair bill. We try

to have the car in first-class order when we leave on long trips so as to avoid road trouble. Our rubber is always good for more than the entire distance. And we take enough serviceable clothing to see us through. As for car depreciation, we don't count this at all, as we figure that the car is used enough in everyday business between vacations to absorb any reasonable charge that could be made for it.

Four cents per mile for four—a cent a mile for one—makes pretty reasonable vacation travel. Suppose some good friend offered to load you in his car and give you transportation, food and sleeping accommodation for ten dollars a thousand miles! Would you go? Certainly you would. Consider what the railroads would charge a party of four. Three cents a mile each or a total of twelve cents a mile for the four. Figure that up for two thousand miles—three times as much as it costs to follow the rubber trail.

In fact, we have never taken a motor camping trip of any distance or duration, short or long, when we did not travel at a lower rate than we could have gone by any other transportation. Of course, we made our own beds and cooked our own meals. There was no "George" to do these things for us, but we can't say that we minded it any. To balance the camp chores we saw more and enjoyed close contact with human nature and scenic beauty to an extent impossible for a Pullman tourist. We saw and heard things he never can, and the night we ran over a skunk on the road we added the third sense—smell—to our experiences!

But don't imagine for a moment that you will have to stay at home if you do not find a budget of ten dollars per day possible. We have named this sum because it fits in with our own experience and our own party's requirements. We don't mind confessing that we usually have money left over when we get back. Many families go and enjoy their motor camping vacations on less than ten dollars a day. Our figures will give you a basis on which to figure, and you can probably make a few short cuts in economy when it becomes necessary. Go to it! You have our best wishes and our admiration.

Ingenious motor campers have worked out many different schemes for lightening their expenses on the highway—schemes not only for saving money but for making money as well. One of the most unusual we have encountered was the pet economy of a family traveling in a small covered truck. They carried a fifty-gallon oil barrel and, when gasoline was needed, they drove to a wholesale station and had the barrel and their truck tank both filled at a reduced rate. They claimed that they saved enough in discounts to more than pay for the trouble of transporting the drum.

Many confirmed rubber tramps go west, east, north or south in certain months and work at seasonal occupations to pay traveling expenses. They shock wheat in the Dakotas, pick apples in Washington, oranges in California, cotton in Arizona, and build roads in New York. A bright-faced young fellow made his way from Atlantic City to San Francisco by repairing cars in the motor camps along the route. He adjusted the carburetor

on our car for mountain pulling at the Cody camp and did a good job for the two bits charged. The last time we saw him was in the Yellowstone changing an axle shaft on a light car. He told us that he was usually busy at every camp he entered.

Motor camping is something like going to college. Some can make it with hardly any cash in their pockets, working their way as they go, while others need a checkbook on each hip. This is all well and good. If we were all alike, what a monotonous place this old world of ours would be!

Here are some figures showing actual costs of a number of the trips we have taken in all parts of the United States. We think the prize-winner for economy, one that should have won any endurance test, was the time three of us drove over 800 miles in a flivver for a total cost of eighteen dollars or but two and a quarter cents a mile for the party. This money bought our gasoline and oil. Fortunately the flivver, which was in excellent condition, gave nearly twenty-five miles to the gallon and used only a quart of oil a day. Those were the good old days!

That eighteen dollars also purchased enough food to keep our belts tight three times daily—nothing fancy, as you can guess, but good bacon and eggs, hot cocoa every sunrise, bread and butter with an occasional section of bologna and a pie. We had fresh fish twice—caught them ourselves—and one evening we broiled three quail shot in a stubble near our camp. Nobody lost any weight on that trip; in fact, a couple of us

gained. We made this an economical trip for the simple reason that eighteen dollars was all the money we three could scrape together.

But we have always been willing, in fact eager, to make our cash last as long as possible, in order to add

Aside from the sport and the physical benefit, fishing keeps down expenses by providing food without cost.

to the mileage covered and the country visited. If our trip can be lengthened or the number of trips we can take can be increased by practicing economy, we all turn Scotch unanimously!

In 1919 four of us toured 3,500 miles over the old Santa Fe Trail for a total cost of $150. This was in the time of

high prices; everything we bought cost more than it does today. We paid as much as fifty cents a gallon for gasoline out on the Texas Panhandle. The roads were bad, mud was thick and rain heavy. We forget how many times we were pulled out of soft places in the trail or how much it cost. Our car was jerked up to solid footing by every kind of power, from a saddle hitch on a cowboy's bronco to a heavy four-horse log team.

One night we slid into a soft place that let us down until the rear fenders were level with the mud. Later on, a settler told us just what kind of mudhole it was. It would have taken first prize in any competition. A week before we struck it, a mule led behind a wagon had slipped in and they had to jerk him out with a choke rope about his neck. That was the place where the four-horse log team did its work for us.

Considering the fact that motor travel was difficult in any western state then, we got by remarkably well and our $150 was well spent. In fact we are glad to say that all our motoring dollars have been well invested and pay dividends regularly in health, retrospection and satisfaction.

In 1924 the same party of us went on a real camping tour, driving over 9,000 miles through the western states and spending over three months on the road. We slept every night of those three months in our tent and cooked every meal we ate, except one, on our folding gasoline stove. The total cost was $600—considerably more than our present figure of four cents per mile—but there were several unusual extras on this long journey.

One was a bill of thirty-six dollars for repairs on the car, due to the carelessness of a mechanic who had overhauled the engine prior to our start. Just before we rushed home we were so tired of patching punctured tubes that we bought a complete set of new tires. This alone shot a hundred-dollar bill. The three months of road wear played havoc with our clothes and most of the family had to be newly outfitted. But we didn't kick. We would have spent much of that six hundred in the three months at home, and see what we had extra! We enjoyed nearly every park and national monument west of the Mississippi. Ask some general passenger agent what his road would charge four people to carry them over the same route. Our park fees alone added up into no trivial sum, ranging as high as $7.50 for entering Yellowstone Park.

In the summer of 1936 we made one of our typical short tours, going to Niagara Falls. The mileage on the speedometer was 1,120 and we spent for four adults a total of $43.21. This is the way the expenses stacked up.

Gasoline and oil	$25.21
Food	8.70
Miscellaneous	9.30

Our car is heavy and we drive rather fast. This explains why so much of our money went for fuel. Food included a few shots of the much-talked-about Canadian beer (which wasn't a darned bit better than some our friends make in their own cellars). Miscellaneous expenses covered camp fees, ferry and toll bridges and special

trips about the Falls. It was a four-day trip and we could have stayed a week at Niagara for but a few dollars additional. No wonder the family hates to stay at home, even for week-ends!

(*Philip D. Gendreau.*)

For those who wish to drop city ways for a while a simple camp in an attractive setting can serve as a temporary home with little expense.

These examples of motor camping expenses have been for travel tours consisting of much driving and less camping. That is only one phase of the game. Many families prefer to stay a week or a month at some pleasant resort camp and spend their vacation camping—living out of doors—instead of touring. Here are some figures that will interest and attract them.

Recently we decided to get away from the hot summer weather and cool off in the mountains. So we headed for the White Mountains and in New Hampshire located a pleasant Forest Reserve camp. It was a free camp, but nevertheless a high-grade one, and it offered many conveniences, including a swimming pool in a dammed mountain stream, firewood and safe drinking water. There were few of the typical city conveniences, but we were temporarily tired of cities.

Splendid hiking trails led in all directions out over the mountains. This was one of the scenic spots of New England and it drew a very high class of campers. A custom prevailed there that we had never encountered before. Whenever a camper packed up to start for home, those who were remaining tooted the auto horns in a chorus of farewell.

We lived there simply but comfortably for two weeks and, when we packed up to leave, discovered that our total expenses had been nineteen dollars. We couldn't have got by at home for that!

Two weeks still remained of our vacation period, so we decided that the seashore was just what we wanted. We located a large up-to-date camp where we had practically every home convenience for a cost of $3.50 per week. Seafood of all kinds was plentiful, and we learned what good fresh lobster really tastes like. There was a lifeguard at the beach and we were in our swimming suits the greater part of the day.

Our two weeks there cost $29.70. These figures are for a party of four and, if you have ever spent two weeks in an

exclusive seashore resort hotel, you can understand how motor camping adds to our pleasure and enjoyment when vacation time rolls around. This gives a very plausible explanation of why folks leave home. You can't blame them when they can "vacation" so pleasantly and economically in an up-to-date motor camp.

A very favorable condition for motor campers is the present low price of well-made and well-designed equipment. Tents, stoves, cots and cooking kits are not only better, but they are much less expensive than they were ten years ago. Our first touring tent cost seventy dollars. It was a real piece of goods too, but today we can buy one just as good for less than thirty-five dollars. When it comes to a showdown, we find the good old American dollar buys more recreation and pleasure than ever, if it is spent on the motor camping trail!

Index

A

Acadia National Park, 218
Accidents, 271
  first-aid kit, 276
Adirondacks, 28
Air mattress, 54–58
Aluminum, cooking utensils, 70
  nested kit (*illus.*), 71
Amusements, bridge and poker, 266
  dancing, 269
  golf, 268
  horseshoe pitching, 266, 267
  past and present compared, 262
  photography, 265, 266
Awning, for meals (*illus.*), 78
Axes, 77, 78
Axles, trailer, 133, 135

B

Bad Lands, S. D., 238
Baggage, folding racks for, 172, 173
  importance of trunk and racks, 176
  packing pointers, 170–177
  stowing in car, 168
    on rear (*illus.*), 169
    on running board, 175
Baggage, traveling light, 98
Bardstown, Ky., 25
Bathrooms, 144
Bathtubs, 81
Bearings, 151, 152
Beds, converted car, 90
    (*illus.*), 92
  folding car cot, 53, 54
  trailer, 122
Beverages, cocoa, 197
  milk, 197, 198
  water, 219, 275, 276
Black Hills, 24, 25
Blankets, airing (*illus.*), 60
  care of, 59
Brakes, car, precautionary tips, 157, 158
  for trailer, 137, 138
  trailer laws, 148
Bran muffins, 68
Breakfast, recipe for quick, 191
    (*See also* Cooking, Food, Recipes)
Brooms, 80, 81
Buckets, 81
Bumper, car, for baggage, 169
  for trailer, 137
Business, varieties done in trailer, 149, 150

C

Camera (*see* Photography)
Camping, beds and cots, 48–61
  child problems, 206–210
  cleaning up on leaving site, 227, 228
  eating outside trailer (*illus.*), 194
  engine problems, 151–163
  furniture, 76
  medical equipment, 276, 277
  modern conveniences on pay sites, 221–228
  outdoor cooking (*illus.*), 183
  outdoor feast (*illus.*), 197
  packing the car, 166–180
  picking the site, 211–228
  pioneer motor (*illus.*), 212
  Sandusky summer scene (*illus.*), 215
  tips for desert, 235–237
  sites for motorists throughout country, 216
  social benefits of, 13, 14
  tent outfits, 30–47
  wardrobe problems, 199–205
  warnings to motorists, 270–277
  women, 248–261
Camping car, compared with trailer, 114, 115
  de luxe model (*illus.*), 115
  homemade (*illus.*), 127
  interior possibilities, 128
Canned soup, 187, 188
Car, child's hammock (*illus.*), 208
  lights, 274
  protecting surface, 165
Cards, playing, 266
Cereals, packing, 198
Chaco Canyon, N. M., 244
Chains, tire, 164
Chassis, importance of, in trailer, 132, 133
Chairs, types and weight, 79
Children, touring problems, 206–210
Cleaning, 202
Clothing, 99–112
  keeping up wardrobe, 199–205
  for men, 102–107
    jackets, 107
    puttees, 105
    raincoats, 107
    shoes, 106
    underwear, 104, 105
  for women, 108–112
    camp costume (*illus.*), 109
    hats, 110
    knickers, 108
    sleeping garments, 112
    shoes, 110–112
Cocoa, as camp beverage, 197
Conservation Commission, 28
Constipation, 68, 277
Cooking, camp, primitive and modern, 181–184
  camp kitchen equipment (*illus.*), 185
  canned goods, 96
  dessert recipes, 195, 196
  in exhaust manifold, 98
  game, 189, 190
  goat meat, 193
  kit requirements, party of four, 72
  packing kitchen equipment, 177–179
  roadside meal (*illus.*), 97
  steaks, 188, 189
  steam kettles, 73–75
  stoves and kits, 62–75
  tips on trailer, 144

Coral Beach, Calif., 217
Cots, folding (*illus.*), 50
  folding type in car, 53, 54
  portable, for children, 207
  weight of, 51
Couplings, for homemade trailers, 134, 135
Cowboys, 245
Crank, car, 162
Crankshaft, emergency repairs, 151, 152
Crawford Notch, N. H., 218
Cups, paper, 96, 97
Cutlery, 72

D

Dade City, Fla., tourist camp (*illus.*), 263
Dampness, 133
  (*See also* Insulation)
Datil Forest, N. M., 252
Deadwood, S. D., 24, 25
Death Valley, Calif., 238
Denver, Colo., 223
  camp sites, 217
Desert, 230–233
  heat and cold, 233, 235
  water supply, 232
Desserts, cake, pie, and pudding recipes, 195, 196
  (*See also* Cooking, Recipes)
Diversions (*see* Amusements)
"Dolly Cop," 218
Duffel, 172

E

Egg matto, 191
Eggs, packing pointer, 198
Electricity, 221, 222
  radio and lighting, in trailer, 147, 148
Emergency fund, 283
Engine, emergency problems, 151–154
  in mountain climbing, 239, 240
  precautions in desert country, 232
  preliminary checkup (*illus.*), 156
Entertainment (*see* Amusements)
Equipment, camping, light and heavy compared, 88, 89
  weight of sleeping, 94
    (*See also* Beds, Cots, Mattresses, Stoves)
Expenses, camp fees, 220, 221
  camp rates in Washington, D. C., 225
  emergency fund, 283
  former costs, 281
  free *vs.* pay camps, 219–222
  paying as you go, 286, 287
  present costs, 282
  trailer depreciation, 132
  trailer *vs.* rent, 146

F

Fan belt, 157
Fender, 178
Fire extinguisher, 162, 163
First aid, 276
Fish, 189, 190
Fishing, 29
  in motor camps, 263
  rod and stream (*illus.*), 260, 264
  in western camps, 223, 224
Flambeau Lake, Wis., 256
Flashlights, 85

Flooring, tent, 38, 39
trailer, 133, 144
Florida, 216
Food, camp dish pointers, 186–198
child and infant, 207, 208
egg matto and meat loaf recipes, 191
emergency requirements on tour, 179
expenses, 284, 290
leftovers, 184
modern camping standards, 182–184
packing for tour, 177–179, 198
stews, 193, 194
week-end recipe, 192
Forks, 72
Frying, 188, 189
Fuel, campfire, in desert, 237
for trailer stoves, 143
(*See also* Gasoline)
Furniture (*see* Beds, Chairs, Stoves)

G

Game, cooking, 189, 190
laws, 29
Gasoline, cookstove, 66
former costs, 289
present, 290
tank sediment, 159
Gaspé Peninsula, Can., 218
Glasses, colored, 234
Goats, 229, 230
Golf, 268
Grades, 239, 240
Gumbo, 240, 241

H

Hamburger steak, 190
Hammonasett Beach, Conn., 222
Hammock (*illus.*), 208
Highways, numbering system, 20, 21
Hills, 239, 240
Hitchhikers, 274, 275
Homemade trailers, 134, 135
Horseshoe pitching, 266, 267
Hot Springs, Ark., 243
Hunting, 29

I

Icebox, iceless, 82
(*See also* Refrigerator)
Idaho, 221
Illumination, camp equipment, 85
cost for trailer, 147
indirect, for trailer (*illus.*), 148
Infants, 207, 208
Information, 25–29
Insects, 277
Insulation, air as, in mattresses, 57
on camping cots, 51, 52
trailer, 139
Insurance, 128, 129, 149
Irons, electric, 205

J

Jack, car, 161
Joshua tree, 237
view of (*illus.*), 236
Junk parts, use in homemade trailer, 135

K

Kaibab forest, Ariz., 10
Kapok, for cot mattresses, 52
Kentucky, 25

Kettles, 73, 74 (*illus.*)
Kitchen, trailer (*illus.*), 143
  touring equipment (*illus.*), 185
Kitchenette, 178
Kits, cooking, 70
    nested (*illus.*), 71

L

Laundry, 204, 205
Leaks, 133
License, fishing, 264, 265
  trailor plates, 148, 149
Lights, car, 274
  tail and warning, on trailer, 137
Lewis River, 14
Leftovers, 184
Luggage (*see* Baggage, Packing)

M

Mattresses, air, 54, 94
  inflating tips, 57
  kapok *vs.* cotton, 52
  roll-up type (*illus.*), 53
Meat, 188, 189
Metal cots, 50, 51
Mileage, costs, 283–285
Milk, 197, 198
Mojave Desert, 233, 234
Motor camping, vacation trips, 290–293
  warnings and reminders, 270–277
Motor camps, free *vs.* pay, 219–222
  rates and advantages, 215–228
    (*See also* Camping)
Mount Ranier National Park (*illus.*), 239
Mudholes, getting out of, 243
  sure method, 245

N

Needles, Calif., 233
Nevada, 231
New Mexico, 230
New York (City), 28
New York (State), 220
Numbers, highway, 20, 21

O

Oil, motor, 232, 290
    (*See also* Expenses, Gasoline)
"Old Kentucky Home," 25
Oven, 69
    (*See also* Stoves)

P

Packing, eggs and cereals, 198
  pointers for campers, 179, 180
  for tour, 166–180
  waterproof bags (*illus.*), 171
Phonograph, 269
Photography, amateur, 265, 266
  as business in trailer, 149, 150
Pierre, S. D., 223
  (*illus.*), 224
Pillows, 59
Pinkham Notch, N. H., 218
Plates, paper, 96, 97, 184
Portland, Ore., 223
Prairie dogs, 190
Puttees, 105

Q

Quoits, 267

R

Racks, luggage, 172, 173
Radiator, 157
Radio, camp equipment, 85
  electric current, 147
  hookup (*illus.*), 86
  motorcar types, 87
Railroad crossings, 270, 271
Ranches, 246, 247
Rapid City, S. D., 223
Raton Pass, 22, 23
Recipes, boiled salad dressing, 186
  cake, 195
  egg matto and meat loaf, 191
  hamburger, 190
  pie and pudding, 196
  spoon bread, 192
Refrigerators, basket, 82
  ice capacity in trailers, 142
  iceless, on running board (*illus.*), 178
    for desert motoring, 233
Repairing, advised before starting trip, 156
  emergency, 151–154
Roads, desert, former and present, 230–233
  gumbo-surfaced, 240, 241
  precaution for dangerous, 272
Routes, ease of following modern, 17–19
  how numbered, 20, 21
Running board, boxes for luggage, 173, 174
  packing baggage on, 170

S

St. Joseph's Cathedral, 25
St. Petersburg, Fla., 216
Salad dressing, 186
San Bernardino Mountains, Calif., 225
Sandusky, Ohio (*illus.*), 215
Sandstorms, 237
Sandwiches, 186, 187
Sanitation, 219, 220
Santa Fe Trail, touring cost, 238, 288
Schroon Lake, N. Y., 256
Screens, 140
Sex, 251
Shenandoah Valley, Va., 218
Shoes, 106, 107
Shuffleboard (*illus.*), 268
Sightseeing, 23
Skunk, 257, 258
Sleeping, in converted car, 90–93
  small tents, 93
  weight of equipment, 94
    (*See also* Tents, Beds)
Sleeping bag, 59
  children's, 208, 209
    (*illus.*), 58
Soap, 75
Sod cloth, 39
Soup, 187, 188
South Dakota, 240
Southern California, 28, 29
South African bags, 83
Spare tires, 134
Spark plugs, 159
Spearfish Canyon, S. D., 224
Speed, 273, 274
Spoon bread, 192
Sports (*see* Amusements)
Sportsmanship, men compared with women, 251
Springs, automobile, 157
  for homemade trailer, 135

Steaks, 188, 190
Steering gear, 158
Storage, 132
Stop lights, 137
Stoves, compared with campfires, 62, 63
  electric, on camp sites, 221, 222
  folding gasoline (*illus.*), 64
  gasoline models, 65–67
  heating, for trailer, 142, 143
  ovens, 68
Streamlining, 132

T

Tables, 79
Tarpaulin, 176
Tents, 30–47
  awning (*illus.*), 42
  economy *vs.* value, 31, 32
  fabrics compared, 41
  flooring, 38
  pitching pointers, 45, 46
  stakes for, 30
  stakes and poles, 43, 44
  "tourist" type, 33
  "umbrella" type, 33, 34
  wall type, 32, 33
  waterproofing and storing, 46, 47
Thermo jugs, 83, 85
Tin Can Tourists, 215, 216
Tires, avoiding trouble, 160, 161
  in desert touring, 233
  spares, 161
  trailer, 122, 134
Toilet, portable, 277
Tombstone, Ariz., 245
Touring, camp beds, 49, 50
  child problems, 206–210
  cleaning problems, 202–205
  clothing, 99–112
  cooking questions, 183–185
  costs, 147, 278–293
  desert and mountain, 229–247
  fording streams, 242, 243
  information bureaus, 25–29
  motor precautions, 155–165
  mountain climbing problems, 239, 240
  planning routes, 15–29
  primitive, 113, 114, 211–214
  short trip requirements, 95
  towing pointers, 138, 139
  trailer and camp cars, 113–129
  warnings to motor campers, 270–277
"Tourist" tents, 33
Towels, paper, 97, 205
Trade-in, 130
Traffic cops, 274
Trailer, backing it up, 117
  buying pointers, 130–134
  camping scene (*illus.*), 215
  compared with camping car, 114, 115
  ease of hauling, 116
  equipment, 118
  floor space, 140
  folding type, weight, 121
  height and width, 132
  homemade, pointers on, 124–128, 134–137
  interior view (*illus.*), 141
  kitchen (*illus.*), 143

Trailer, lights and brakes, 137, 138
number of, 146
prices, 120
safety, 119, 120
size compared with car (*illus.*), 131
small model, cost, 124
tires, 122, 123
tourist camp (*illus.*), 145
towing power needed, 138
upkeep, 145
ventilation, 139, 140
Trunk, 175, 176
fender type, 178

U

"Umbrella" tents (*illus.*), 33, 34
Underwear, 104, 105
Utensils, 95
(*See also* Cutlery, Stoves)

V

Vacationing, typical trips and cost, 290–293
Ventilation, 139, 140

W

Washington, D. C., 224, 225
Water, drinking, 219
importance in desert motoring, 233, 234
inspection, 275, 276
Waterproofing, 126
in mattresses, 53
in tents, 46, 47
(*See also* Insulation)
Weather, 241
Indians as prophets, 242
Weight, 133, 134
Wheels, 159
White Mountains, 218
Women, 248–261
camping alone, 258, 259
Wood, for trailer flooring, 133

Y

Yellowstone Park, fee, 290
information booklet, 27
Lewis River (*illus.*), 14
Yosemite National Park, 26

New Ways in Photography

JACOB DESCHIN

Discusses "trick" photography, ni
and indoor work, flashlights, the "c
did" camera, double exposures, lo
range photography, screens and co
photographs, the making of pho
murals and transparencies, posed scen
re-touching, infra-red photography—
short, all those branches of camera w
which are little known to most amate

"An invaluable book on every asp
of practical photography."—*Book-of-
Month Club News*. "Those who wish
get more fun out of the hobby are
advised to leaf through this book.
Detroit News. "Amateur photograph
will find Mr. Deschin's book of m
than usual interest."—*Baltimore S*
"A deeply informative book."—
Angeles Times.

Illustrated $2.75

Whittlesey House

McGRAW-HILL BOOK COMPANY, IN
330 West 42nd Street, New York

A Companion Book for "Touring with Tent and Trailer"

THE TRAILER FOR PLEASURE AND BUSINESS

WINFIELD A. KIMBALL *and* W. LIVINGSTON LARNED

EVERY month more and more people are discovering the advantages of trailer travel, and the manufacturers of trailers report a tremendous boom in sales. *The Trailer for Pleasure and Business* aims to give all the essential information on the selection, equipment, operation, and upkeep of trailers.

Few people realize the number of trailers in use as shops, offices, and showrooms, in addition to their employment for touring and as temporary or permanent living quarters. The authors discuss the large number of ways in which people are adapting trailers as aids in making a livelihood. These include many practical applications, and offer a wide variety of possible new careers.

For the reader interested in the trailer primarily as a perambulating home, the authors supply complete and specific information as to the best types of trailers on the market, desirable equipment, how to drive with a trailer, where and how to camp, hints on trailer housekeeping, travel routes, laws and regulations affecting trailers, trailer organizations, and many other topics. The book will save the novice endless time and trouble in becoming acquainted with this new mode of travel.

For the reader's convenience, a selected list of the best tourist camps all over the United States is included.

Contents: Advantages of Trailer Life, Selecting the Trailer, Practical Advice about Trailers, "Housekeeping" in a Trailer, Trailer Pointers along the Highways, Camp Sites and Camp Life, Health along the Highways, Recreations while Camping, Travel Routes—Trips to Take, The Trailer That Pays Its Own Way, Trailer Organizations—Legal Aspects.

$2.50

Whittlesey House

McGraw-Hill Book Company, Inc.

330 West 42nd Street New York